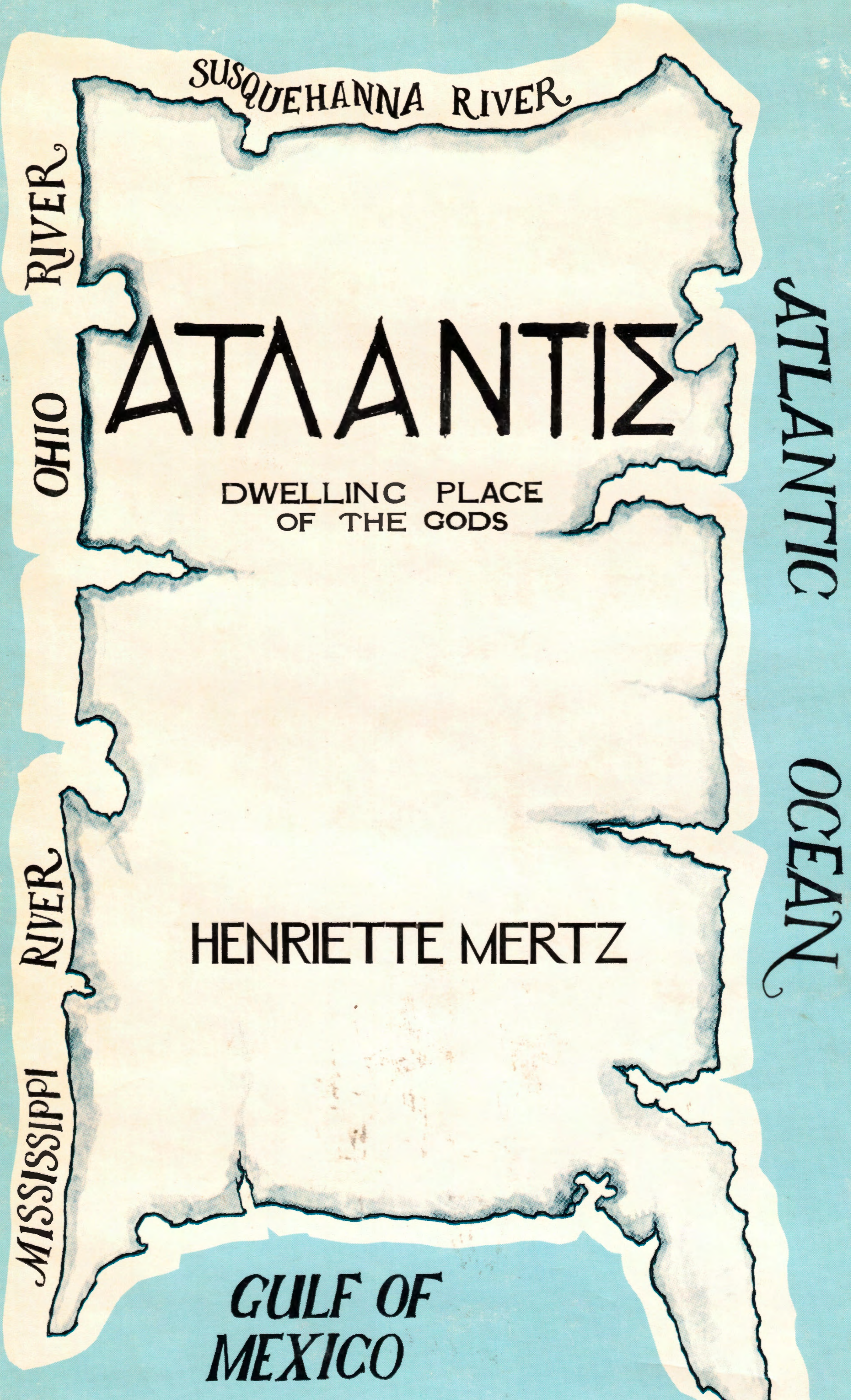

ΑΤΛΑΝΤΙΣ

DWELLING PLACE OF THE GODS

HENRIETTE MERTZ

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ATLANTIS

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by

Henriette Mertz

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Box 207 – Loop Station
Chicago, Illinois 60690

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In memory of
Constantine A. Vovolinis

Books by same author

PALE INK (GODS FROM THE FAR EAST – paperback)
THE NEPHTALI
THE WINE DARK SEA
ATLANTIS

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PREFACE

If, as we are told, some 5000 or more books have already been published purporting to locate Plato's "lost Atlantis," one might ask why still another should be written. The answer is not difficult. The object of this book is to seek the truth, if truth there be, in Plato's story and, contrary to previous books, it advances no preconceived theory but follows as strictly as possible every descriptive feature set forth by Plato.

Our study therefore comes as a radical departure from accepted academic theory for we have located the island of Atlantis in the heart of America—southeastern United States. Every major feature—location across the Atlantic, size and date—has been found and found to be as accurate as would be humanly possible after the lapse of three millennia and the various retellings of the story. For example, Plato stated that the palace of Poseidon stood on an island encircled by water: "And this island wherein stood the royal palace was five stades in diameter." (a stade being 606 feet). We have included in our work two maps of this island, one drawn by Jones c.1853 and the other by Moorehead in 1932—the island as drawn by Moorehead being approximately 3000 feet or five stades!

For the past one hundred years, since the first International Congress of Americanists met in Nancy, France, in 1875, heated controversy over the subject of Plato's Atlantis, between professional archaeologists in America and those they consider amateur, has been both bitter and unyielding. In a recent book dealing with this matter, written by a professor of archaeology and published by a prestigious university press, the author refers to all persons who are not professional archaeologists as "enemies."

Running throughout his book are such statements as: "The strained relations which fairly generally obtain between the professionals on the one hand and the thousands of Lost Continent, Lost Tribes and Egyptian enthusiasts on the other stem from four centuries of controversy—." "—the Ph.D's regard their amateur harriers as, at least, misguided mystics whose theorizing in such scholarly fields is emotional rather than intellectual." In spite of the preponderance of tangible evidence herein set forth, some twenty or more publishers, guided by academic counselling, rejected this manuscript and it is against this intolerant position within the academic community that this book has been written and privately published by the author.

In venturing into these troubled waters, we too may have fallen into error for scientific study with reference to earthquakes and their cause is of very recent knowledge and research still remains in a state of flux—continental drift, which up to 1969 was ridiculed, now is accepted. It is this newly discovered scientific material in the field of geophysics that makes possible our understanding of Plato. As we are writing for the layman—not for scholar nor scientist—this technical matter has not been dealt with in depth but should more detailed information be required, it is hoped that the bibliography will provide useful material.

This book could not have been written without help of scores of good friends who have encouraged me by giving of their time, their specialized skills and their understanding. In acknowledging my gratitude, I am fearful that I may have overlooked someone for the time extends back some twenty years when I first started work on the Greek Classics. At that time, I made an extensive study of ancient copper mining on Isle Royale and Dr. Roy W. Drier, then Professor of Metallurgical Engineering at the Michigan College of Mining and Technology, whose work resulted in the carbon-14 dating of these ancient copper mines, generously placed his vast collection of early unpublished papers, reports, letters and his own research at my disposal and my work in this field could not have been written without his help. Also, in the field of copper, my thanks go to Floyd Keller, Metallurgical Engineer, for a most informative day spent in his laboratory; to Dr. David Hyman for his careful laboratory analysis in running a special test on the cement material from Bimini; to Hon. Antonio Matias, of the Portuguese Embassy, Washington, for historical background surrounding the legendary Seven Cities of Antillia; to Francis J. Heyden, S. J. of Georgetown University for copy of broadcast with reference to the Piri Re'is Map; to Capt. Georges Huout, Captain of the French Research Submarine ARCHIMEDE for his letter confirming his discovery of the giant stone stairway off the coast of Puerto Rico; to Frank Waters for permission to quote from his *Book of the Hopi*; to C. Merritt Winsby, Vice President, North American Rockwell, who furnished me with copies of unpublished reports, research, correspondence and other important material resulting from exploratory work at Bimini financed by that company; to Ron Powers for his perceptive article in the Chicago Sun-Times; to special friends Edna Elizabeth (Pat) Wetterer and Dr. Frank Pickel who have stood faithfully by over many years and to my good friends in Greece, Prof. Lambros and Toula Pararas, Capt. G. C. and the late Mrs. Kolaitis, John and Despina Passas. For the photographs, I must thank Stephen Gwin for his dramatic photograph of the waterspouts off the Bahamas and the American Association for the Advancement of Science for permission to use this photograph which they placed under copyright—also to Stephen Gwin for the photograph of the clouds; to John Kurtich for photographs from Crete, the pythoi and double axes; to the Field Museum for the Egyptian Solar Boat; to NOAA for the photograph of the Gulf Stream taken from a satellite; to Smithsonian for the excavation of the building in Tennessee and the Great Serpent Mound; to National Park Service for Russell Cave National Park; to Newberry Library, Ayer Collection, for permission to publish the map of Andrea

Bianco; and lastly to Chicago Public Library, Regenstein Library University of Chicago and Newberry Library. I am grateful to each and every one.

Henriette Mertz
Chicago, October 1975

Plate I—Waterspouts off the Bahamas Photo by Stephen Gwi

ENIGMA OF BIMINI

CHAPTER I

When the gods divided up the whole earth, here into larger portions there into smaller, Poseidon received as his allotment the island of Atlantis. Thereon dwelt one of the natives originally sprung from the earth, Evenor by name, who lived in a cave on the side of a low mountain with his wife Leucippe and their only daughter Cleito. When the lovely young damsel became of marriageable age and her mother and father having died, Poseidon, being smitten with desire for her, wedded her. Of this union, five pairs of twin sons were born and after they had been reared up, Poseidon divided the island of Atlantis into ten portions giving to the first born of the eldest pair his mother's dwelling place and him he appointed to be king over all the rest. He gave names to all and to the eldest he gave the name Atlas after which the whole island was named and the sea spoken of as the Atlantic.

A large family of distinguished sons sprang up from Atlas but it was the eldest who, as king, always passed the scepter to the eldest of his sons. Each succeeding generation added to the beauty of the island and the wealth they possessed surpassed anything known before. Thus on the island of Atlantis there now existed a confederation of kings of marvellous power holding sway over all the island as well as parts of the continent beyond and many smaller islands that extended out into the sea.

Then—suddenly—disaster struck. One grievous day and night befell them when a catastrophic earthquake and flood swallowed up the island and all the people vanished, washed away by the flood. Since that fated day, whereabouts of the fabled island of Atlantis has remained a mystery.

This oft-told story came about during one of Plato's discourses when Critias related the tale to an assembled group as it had been told to his grandfather, Critias the Elder, a descendant of the brother of Solon. Solon, one of the great statesmen of Greece, having laid the foundation for a constitutional democracy and believing that his reforms would work better if he were absent, left Athens and travelled for ten years partly for business reasons but more probably from a sense of curiosity to see strange places and meet interesting people. During the course of his wanderings, he spent considerable time in Egypt and while at Sais on the Nile delta, he met Sonchis, one of the priests of the goddess Neith. Sonchis related the story to Solon as it had been preserved in hieroglyphics and so it is from Solon's sojourn in Egypt that the story of Atlantis has come down to us.

Skeptics scoff at Plato's story dismissing it as nothing more than a figment of his imagination, whimsy, fantasy, a dream of an utopian city, dwelling place of the gods. Yet, during the telling of this ancient tale, Critias four times assured us that it was true even though he said the size of the island and its many features were so large he had difficulty in believing it himself but he felt duty-bound to report what he was told. To which Socrates replied that the fact that the story was no invented fable but genuine history was all important.

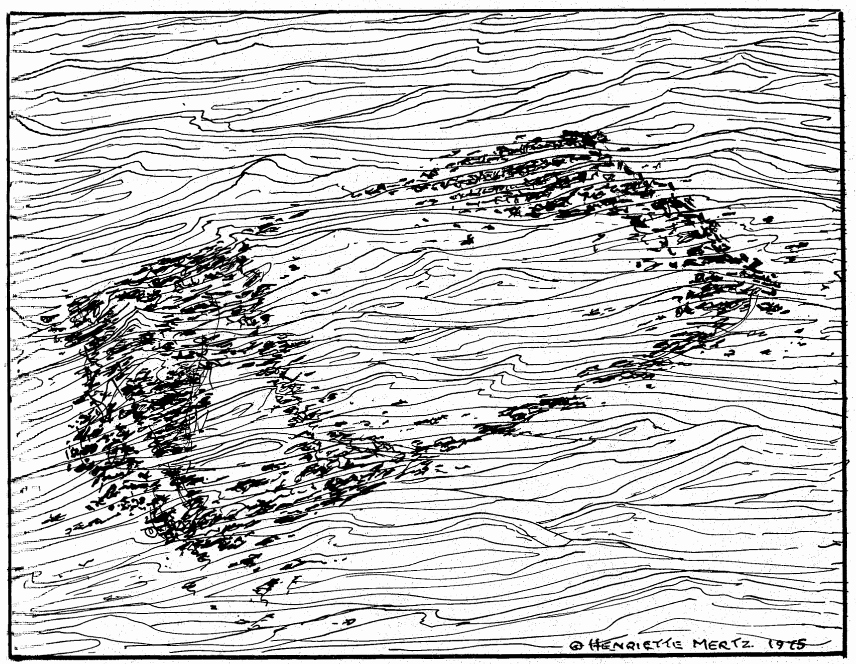
If then the story be true, an island in the western Atlantic of considerable magnitude and incredible beauty must have been known to ancient peoples. Homer's

description of Scheria, the land across the sea where Odysseus found himself, corresponds in detail to Plato's account as does the lengthy description of Diodorus Siculus. Plato, Homer and Diodorus all stress ideal living conditions, delightful climate, clear spring water, luscious fruits, picturesque scenery—a bountiful land. Plato's story originated in Egypt around 600 B.C., Homer's in Greece about 800 B.C., and Diodorus Siculus' in Carthage about the turn of the Christian era. Three accounts unrelated in time and place describing a fabulous land far across the sea may be coincidental—but, again, they may not be.

A certain mystique surrounds the western Atlantic. Whatever may have happened in some past geologic age, this area unlike other areas of the globe, presents geologists with an unsolved jig-saw puzzle in which pieces either do not fit or are missing. Here, three or four thousand years ago, water suddenly rose thirty feet covering an extensive tract of land—the now submerged Grand Bahama Bank—while at the same time, land north of the St. Lawrence rose. Here the Atlantic reaches its lowest depth of 28,374 feet at the Puerto Rico Trench. Here, in early days, that vast expanse of floating seaweed, the Sargasso Sea, sent one becalmed sailing ship after another to the bottom snarled amongst the weeds unable to extricate itself. Here in this region from Florida along the West Indies and north to Bermuda, known today as the "Bermuda triangle," ships and planes have suddenly disappeared leaving no trace. Strange and unpredictable events occur with uneasy regularity within these waters, a bizarreness of breathless waiting for the next thing to happen.

And happen it did. Late in 1968, electrifying news flashed round the globe that Atlantis had been found. First excited dispatches reported ruins of a large temple that had been sighted from the air submerged in shallow water on the Grand Bahama Bank. Not alone one temple but scores of other buildings. Many of the first reports were fabrications and the almost instant excitement that captured public imagination soon was tempered by sober announcements that these underwater structures were nothing more than old turtle pens, neither ancient nor man-made. As this controversy got underway, it was found that turtles never lived in pens so another answer must be forthcoming.

Submerged ruins in this region had first been reported by fishermen in the early 1920's but little attention had been paid to them and the incidents passed without undue concern. In the summer of 1957, Dr. William Bell sighted and photographed what he described as a spire-like form rising from six feet above the ocean bed protruding from what appeared to be a double cog-wheel. In 1967, a pilot while flying low over the Bahamas, reported seeing a large stone structure which he believed to be of human construction. Dr. J. Manson Valentine, Honorary Curator of the Science Museum in Miami, sighted several unusual geometrical configurations on the ocean floor in the area between Bimini and Andros but before he had time to examine the area more closely, shifting sands carried by underwater currents of the Gulf Stream covered the structures. It was not until the summer of 1968 that Valentine was able to explore the ocean floor. At that time he discovered a building complex measuring approximately 100′ x 60′ which he believed to have been man-made. A few weeks later, on 2 September 1968, Valentine, diving in three fathoms of water off the northwest coast of Bimini, made his most amazing discovery. An extensive pavement of rectangular stone blocks, accurately aligned, formed a perfect mosaic walkway stretching in a straight line for some three-quarters of a mile. Flushed with the thrill that accompanies discovery, and no longer able to keep it secret, Valentine disclosed his astonishing find to the press. Atlantis had been found!



Submerged building, Bahamas

With such an astounding announcement by the mass media, thousands of the curious converged on the Bahamas by ship and plane, few realizing the significance of what they came to see. Divers went down and soon a dozen or more complex stone structures were reported over a seventy mile area between the islands of Andros and Bimini—twelve large stone structures, temples or palaces, one of which was hexagonal; buildings with walls three feet thick; a circle of forty marble pillars standing upright in what might have been a temple courtyard; a cache of cylindrical objects of cement amongst which were two fluted marble columns. Before too long, the Bahama government registered concern with so much ill-conceived activity and wishing to protect and preserve whatever this submerged material might later be found to represent, took measures to stop widespread destruction and removal issuing orders against unauthorized diving.

North Bimini, the larger of the cluster of islets, is seven miles long and a few hundred feet wide hardly comparable to the Atlantis that Plato described. Some 700 acres of land were owned by North American Rockwell, a company active in the Space Program. At the time these submerged ruins were reported, this company was in the process of developing the island under contract with the Bahama government. Question arose concerning possible age of the ruins and while both the company and the government recognized the highly controversial nature of the situation, neither wished to be carried away by any romanticism or mystique surrounding the question of "Atlantis." However, should evidence prove these submerged features to be of human construction the company had no alternative but to proceed with development accordingly.

Two different approaches lent themselves to scientific study—the cylindrical objects of cement could be analyzed to determine probable age of the material and the line of parallel blocks which Valentine had discovered might provide an answer as to whether it was of human construction. The first problem was given to Prof. Wyman Harrison, a licensed geologist and the second problem turned over to the University of Miami, School of Marine and Atmospheric Sciences, Division of Marine Geology and Geophysics. Both rendered negative reports—first, the cement was less than 150 years old and second, the line of blocks was common beachrock. These two reports provide a classic example of how evidence is interpreted and how our knowledge of history is shaped.

One of the cylindrical cement objects was brought to the surface and opened for examination. Harrison submitted the first sample to Prof. Ronald Perkins of Duke University

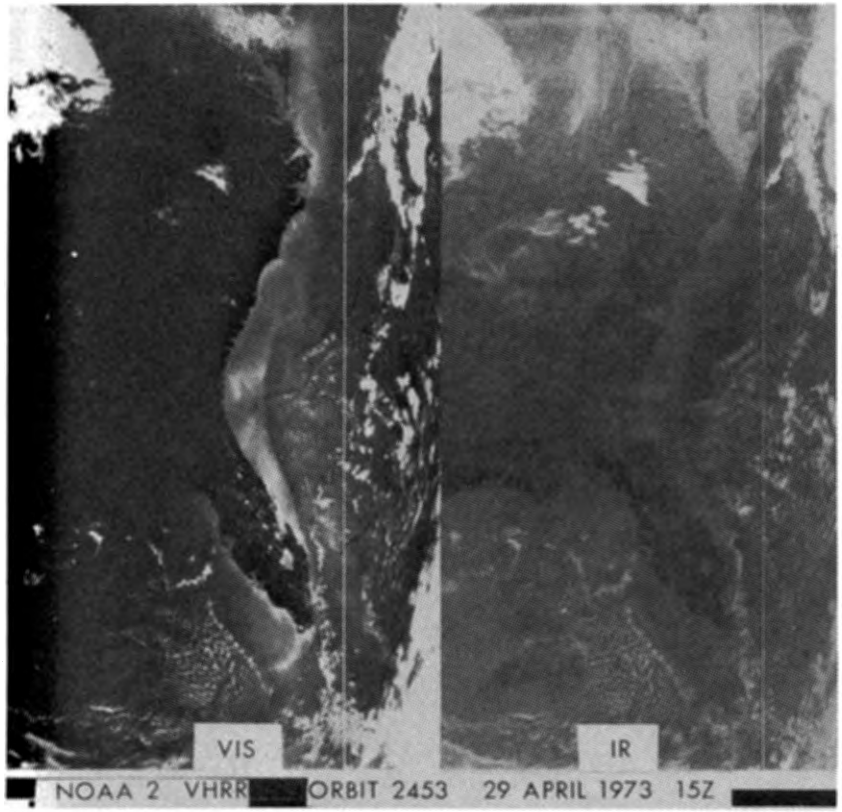


Plate II—Gulf stream off Florida taken from satellite
Photo National Oceanic and Atmospheric Administration

whose analysis indicated that the substance was not limestone. He associated the material with volcanic matter and speculated that pozzolan might have been involved. This type of cement is the oldest known of hydraulic mortars dating back to Greek and Phoenician times. It is formed by incorporating volcanic tufa with slaked lime and sand which hardens on contact with water.

Harrison next sent samples to Portland Cement Company of Skokie, Illinois, to Master Builders of Cleveland and to the U.S. Army Corps of Engineers. Portland Cement submitted the sample for analysis to their laboratory technician but they were unable to determine the origin of the cement, replying that they did not have answers to the questions as to where the material had been made or at what period of time. The Vice President of Master Builders in charge of research, replied that he was not aware of this type of cement and that he could neither speculate on its source nor date it. The U.S. Army Corps of Engineers report was missing. Harrison, in his formal report to North American Rockwell, after charging Valentine with wishful thinking calling his statements unscientific, either false or a misrepresentation, pointed out that literally scores of ships floundered in the Bahamas during storm over the past several hundred years and these cement objects had probably been off-boarded to lighten the ship's ballast. He called special attention to the distinguished background of both Portland Cement and Master Builders to whom he had referred the samples implying that his report resulted from their findings. His report then stated that the material seems to be a hydrated natural cement probably less than 150 years old. He made no mention of Perkins' analysis or that neither Portland Cement nor Master Builders had recognized the substance and were unable to date the cement. It therefore follows that any date as recent as 150 years ago appears to have been wishful thinking on the part

Plate III—Pythoi

Photo by John Kurtich

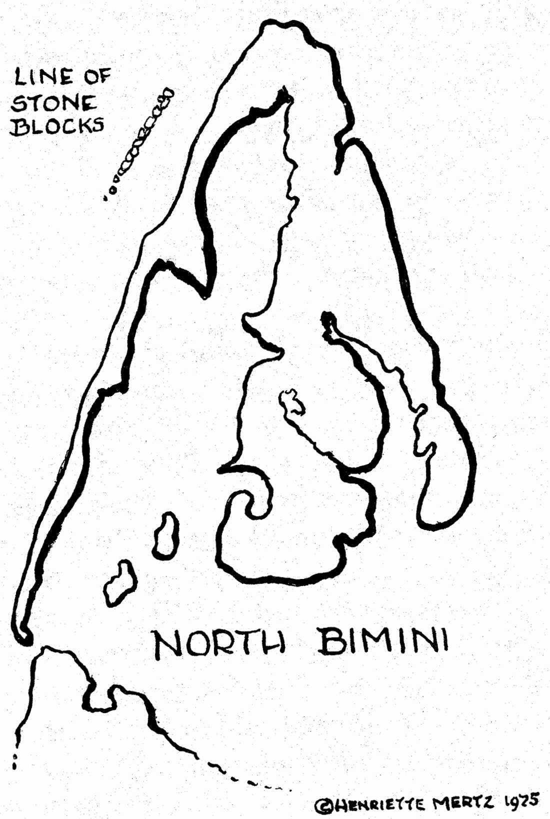
of Harrison himself. No analysis by Dr. Perkins, Portland Cement or Master Builders supported this date. Quite the contrary appears to be true.

In describing the cylindrical objects, Harrison noted that the cement had been poured dry into wooden barrels and hardened on contact with water—the barrels, having long since disintegrated, acted as a mold. In giving the shape of the wooden barrels, Harrison placed the normal center bulge strangely off-center and reported a two inch variation between top and bottom circumference. Again, if the dry cement hardened within wooden barrels on contact with water, staves which formed the barrel would normally leave a ridge running from top to bottom at the join. But no such ridge appears—the surface is smooth. If, on the other hand, as Perkins observed, the substance might well be an ancient pozzolan cement, then the containers could well have been the ancient Greek pythoi, ceramic jar having a normal off-center bulge, top and bottom circumference unequal and a smooth interior. Pythoi were the common receptacles used throughout the Mediterranean world as both storage jars and containers for transporting any and all types of commodities.

The paramount issue however, concerned the long, mosaic line of blocks which Valentine had reported. Having been dismissed as turtle pens, was the wall or walkway of human construction or was it a natural formation that merely resembled something man night have put together? John Gifford, then a graduate student in the Division of Marine Geology, University of Miami, was given the assignment to determine whether or not the stone blocks were fitted together as separate and individual blocks and so of human construction or whether what looked like a long line of blocks might in fact be nothing more than beachrock that nature had fragmented into pieces. If his study proved the blocks to be individual and separate, such a

finding would have tremendous impact since these ruins would then represent the work of an unknown civilization in our very front yard—a matter unacceptable to present teaching. However, should his study find the blocks to be beachrock, no problem would arise for beachrock was common to the area. Beachrock is a natural formation built up by winds whipping sand into swirls which in turn intermingle with spray from the surf and solidify along the shoreline.

In his first report, Gifford found the mosaic pattern of the blocks to be something of a geological engima. His survey indicated that they were individual blocks resting on underlying bedrock which showed no fracture but was smooth; that none of the evidence conclusively disproved human intervention and the blocks did not resemble any kind of beachrock. Such a finding was unthinkable. In his second report some twenty months later, however, Gifford apparently had a change of mind without indicating any reason for doing so. This time he relied on negative evidence, something he looked for but did not find—tool marks on the stones. Why tool marks should be a criterion is not clear. He apparently overlooked the fact that ancient workers in stone, being highly skilled craftsmen, left no tell-tale tool marks but even had they done so, constant movement of the water together with abrasive action of sand long since would have polished off any tool marks. Gifford's real struggle came when he tried to explain the mosaic pattern by relating it to the manner in which nature fragmented beachrock but he found no such simple answer. It was here that he placed himself in a dilemma believing on the one hand that the continuous line of blocks had been fragmented by nature but unable to account for known beachrock in the immediate vicinity that was neither split into blocks nor even cracked. Yet he was firmly convinced that in some future day geologists may provide an answer.



Map of North Bimini

This was the crucial issue and after three years of wrestling with the problem, Gifford could not bring himself to face it head on—instead he bowed out. The large building structures between Andros and Bimini had not been studied. Having no alternative, North American Rockwell, based on these two inconclusive or negative reports, finally gave up and terminated their contract with the Bahama government. So ended the once hopeful development of

this lovely island paradise of Bimini and so also was quashed any thought of an ancient civilization submerged on the Grand Bahama Bank.

Scientific interest in these submerged ruins remained very much alive in other parts of the world. Being intrigued with persistent conflicting reports, a French group of scientists under the aegis of the Sorbonne, to satisfy their own curiosity, decided to send one of their top marine geologists, Pierre de Latil, to Bimini not to look for an explanation but to see what there was to be explained. His report, in spite of its highly technical nature, fairly bristled with excitement as he related astonishment of what he saw. He spoke of contradictory opinions published in scientific journals which had led the French group to speculate that possibility did exist that these submerged ruins might involve archaeology—that they were man-made. However, should they prove to have been formed by nature, such a phenomenon would be a geological enigma without parallel in the world and they therefore wanted to look at it. Before leaving France, de Latil was more or less persuaded in his own mind that possibility existed of a valid natural formation and he fully expected to confirm the geological formation at the site. His fascination with the problem was apparent as he examined one feature after another while his questing mind did a slow right-about-face shifting most reluctantly from a natural formation and the geological solution to a man-made construction—an archaeological one. He found the blocks independent one from another fitted perfectly together as a mosaic—not as a fracture split apart by nature. This was the problem Gifford struggled with but failed to resolve. De Latil in concluding his report stated: "We returned from the Bahamas as believers in the archaeological solution."

Our story started with Plato's tale of a large island at a distant point in the Atlantic Ocean that suddenly disappeared. Four times Critias assured us that the tale was true and historical fact. As we were in the midst of studying the question to determine as best we could whether the story might be fact or fiction, these unexpected ruins were reported in the very region where Plato placed Atlantis. We felt that we would be remiss if we failed to set forth this highly controversial matter since possibility did exist that it may shed some light on this ancient legend.

In the following chapters we shall step back in time from the known to the unknown to determine whether or not in some manner knowledge of this region may be traced back to an ancient day and so back to Plato. Historically, our first acquaintance with these troubled waters stems from the landfall of Columbus on the island of San Salvador in the easternmost chain of the Bahama archipelago. Following Columbus came such well-known explorers as Ponce de Leon, discoverer of Florida who became first governor of Bimini; Narvaez and his disastrous expedition along the Gulf Coast ending with the incredible trek of Cabeza de Vaca. Shortly thereafter came Hernando DeSoto whose infamous expedition was first to encircle the interior of southeastern United States and it is his path that we shall follow.

THE DESOTO EXPEDITION

CHAPTER II

How much information did Columbus have before he set sail from Spain? Did he know beforehand that islands existed in the far western Atlantic? Did he possess maps and charts of this region as Piri Re'is indicated? From early childhood we were taught that Columbus was first to cross that vast expanse of open ocean—that impenetrable Sea of Darkness full of frightening monsters. But was he first? If he were not first, were the Norsemen first? Was Columbus himself not a member of an expedition that had reached Canada sometime around 1477? Had he not been in Iceland previously where knowledge of Greenland and land to the west had been known for centuries? How many sailors had reached our shores since time immemorial but left no record? Inscribed stones recently found in Maine and Quebec tell us that men from Carthage were here. Herodotus noted that Phoenician and Greek merchantmen sailed beyond the Pillars on expeditions in search of sources of raw materials—copper, spices, fine woods, tin—frequently taking three years for a return voyage.

After the fall of Carthage, the Strait at Gibraltar was closed to ships. Then came a period known as the Dark Ages when Europe went through deep depression—intensely bitter cold winters, devastating bubonic plague, famine and revolt of the lower classes. In the Mediterranean area, early in the 8th century A.D., Moors crossed over from Africa into southern Spain carrying on almost continuous warfare over the next seven hundred years. After prolonged seige, in January 1492, Granada fell and the last stronghold of the Moors was recaptured. In the late summer of that same year, Columbus sailed out from Palos.

While Columbus represents the last of a long line of ancient Mediterranean seamen who had crossed that Sea of Darkness, yet he must be conceded first of modern explorers to open Atlantic seaways to an outpouring of intrepid navigators who followed. During the 14th, 15th and 16th centuries, nautical charts of the Atlantic circulated freely in countries bordering the Mediterranean. Columbus was familiar with them as were Ponce de Leon and DeSoto. They were common property.

These nautical charts, to be discussed more fully in the following chapter, depicted a large island in the western Atlantic identified as Antillia and it was this very island that Columbus sought. Grants had been offered by the Portuguese government as early as 1452 to any of their subjects who would discover islands in the western Atlantic. Starting in 1475, grants were awarded to such explorers as Fernando Telles and Fernao Dulmo, with specific instructions to find Antillia, the fabled Island of the Seven Cities. According to his son Fernando, Columbus well knew of this legendary island having earlier applied to the Portuguese for a grant which he failed to get and it was this island that he sought when he left Spain. While Columbus did not reach Antillia, his first landfall occurred at San Salvador, due east of Bimini in the Bahama archipelago where he had presumed Antillia to be.

Following on the heels of Columbus, scores of mariners under both Spanish and Portuguese flags sailed into these waters. One of particular interest was that of Panfilo de Narvaez which set out so hopefully from Cuba in 1528 to find the island of Seven Cities of Antillia and which met with one disaster after another. Having been blown off course, Narvaez landed his men just south of Tampa on the Florida Gulf Coast on 14 April 1528, not knowing where he was. He divided his group into two sections sending his ships along the coast to locate suitable harbors while his land forces proceeded on foot or on horse. He failed to connect with his ships and after months of aimless wandering, lack of proper food, wallowing in swampy marshland, passing through hostile territory, battling the elements in a backwater wilderness, Narvaez and his emaciated men eventually found their way to Anhayca Apalache, on the north coast just south of present day Tallahassee, a harbor known today as Apalachee Bay. Having by now killed his horses for food and being no longer able to proceed by land, Narvaez constructed five ships which he hoped would carry him along the coast eventually to Mexico. Four ships were lost during storm including that of Narvaez. The fifth, under command of Cabeza de Vaca, was wrecked off the Texas coast near present Matagordo Bay. A long chain of disastrous events stemming from this wreckage eventually ended with the ill-fated expedition of Coronado.

The incredible trek of Cabeza de Vaca groping his uncertain way westward, reads like some horrendous nightmare. After years of wandering, he reached Mexico City in July, 1536 having as his sole companion the slave Esteban. On his return to Spain, Cabeza de Vaca, to make his story of agonized suffering even more fantastic than it actually was, told exaggerated tales of those Seven Cities of Antillia which, in fact, he never saw.

Two years after Cabeza de Vaca left for Spain, the slave Esteban with considerable self-assurance, contributed to the already charged atmosphere by organizing an expedition of his own with the help of the Franciscan friar Marcos. Setting out from Mexico City, Esteban and his small party wandered around northern Mexico and into Arizona in a state of bewilderment committing inexcusable acts of violence which eventually led to his murder. After Esteban's death, his companions fled carrying word back to Marcos that Esteban had found the "Seven Cities of Cibola." No such cities existed. However, Marcos passed the word "Cibola" on to Mexico which in turn led to the ill-contrived Coronado expedition. Since that time, historians have unfailingly confused the Seven Cities of Antillia with the non-existent Seven Cities of Cibola—the number seven being common to both.

Following in the wake of Cabeza de Vaca, the first to explore the interior of southeastern United States was Hernando DeSoto who landed on the west coast of Florida on 18 May 1539, eleven years after Narvaez and Cabeza de Vaca. Because DeSoto's expedition, diabolical though it was, and carving as it did an unbroken trail of scorched earth ravished by fire and sword, yet is of singular importance to us since he was first of the Europeans of whom we have record whose reconnaisance into this region is of special interest to our story. First, the area which he encircled encompassed the Blue Ridge, the Cumberlands, the Great Smokies and the Alleghenies—the extent of the Appalachian chain and second, place names of towns and villages through which he passed—many of which remain and have significance today.

Hernando DeSoto was a man of considerable wealth and experience having served as Lieutenant-General under Pizzaro in the Conquest of Peru and at the time of this expedition he was serving as Governor of Cuba. It is reported that on his return to Spain from Peru, he carried with him the equivalent of one hundred thousand pesos in gold as his share of the plundered wealth of the Inca. With this background of exploration, he coveted still greater wealth hoping to find it somewhere in the north of Florida where stories circulated by Cabeza de Vaca told of the

wealth of this newly discovered region, of a fabulous palace and streets paved with gold, and here to the heart of Appalachia DeSoto came.

While the precise route DeSoto followed remains debatable, yet the general path can be traced partly by names of towns through which he passed and partly by minute descriptions of geographical phenomena recorded by the Fidalgo of Elvas and by Ranjel, DeSoto's private secretary, both of whom kept fairly accurate records of day to day events. Many place names which we find noted in these diaries still exist—corrupted in some instances but yet recognizable. Since these names were set down on the spot at that time, they therefore would have been in existence at that place before the coming of DeSoto. Spelling may change due to language variation where sounds may be reduced differently by two individuals setting the word down phonetically. However, in spite of these corruptions, many place names which the Fidalgo of Elvas or Ranjel recorded still exist and can be located.

After landing in Florida, at or near Tampa Bay, the expedition headed north crossing a great marshland and arrived at a major town named Cale. According to the Final Report of the United States DeSoto Expedition Commission—a commission appointed for the purpose of tracing DeSoto's route—the Cale of DeSoto is our present-day town of Ocala. Proceeding north then west from Cale, after a considerable number of days journey, Elvas noted another important town by name of Axille, which, according to the Commission, is present-day Aucilla some twenty-five miles due east of Tallahassee—a place name phonetically equivalent and with only a slight variation in spelling. Due west of Tallahassee, the party interrupted their journey for several days' rest at the town of Calahuchi—present-day Chattahoochee.

From Calahuchi, DeSoto set out for Anhayca Apalache, an area made known to him from the earlier expedition of Narvaez and Cabeza de Vaca. Here it will be noted from the journal of the Fidalgo of Elvas that Apalache was the seat of a powerful Chieftain to whom the entire region owed allegiance. That Apalache was of considerable importance before DeSoto's arrival, there can be little doubt. The name "Apalache" extends back into antiquity but how far back no one presently knows for it was there before Cabeza de Vaca and likewise before DeSoto.

After an extended stay in Anhayca Apalache, the exploring party ascended the Apalache River following the eastern tributary and travelled north on the Flint River reaching a point some thirty miles or so south of Atlanta, then turned eastward sweeping in a wide circle, crossing the Savannah near Augusta, into South Carolina, thence arcing around north and west cutting across the southwestern tip of North Carolina and following the course of either the Hiwassee or the Little Tennessee to its junction with the Tennessee River below Knoxville. Here DeSoto camped at Chiaha, a large well populated island in the Tennessee River, spending the better part of a month reconnoitering and using Chiaha as a base of operations. Diary entries at this point show that the climate was delightful, the meadows rich with maize and the soil covered with verdure fattening their horses.

While they were resting at Chiaha, the Chieftain from a distant region came to call on DeSoto. On questioning him, DeSoto was told that should he travel north he would find a rich province called Chisca; that a forge was there for copper and other metal of that color, much finer but not used due to being softer. DeSoto had heard of this province of Chisca of which the Chieftain spoke and had been shown knives that were said to contain a mixture of gold which came from there. However, for some unexplainable reason the diaries do not disclose, DeSoto, in spite of his

quest for gold in this very region, failed to follow this information. Instead he followed the river, travelled south, leaving the river at the bend just below Chattanooga, heading west.

This wide-sweeping arc starting south of Atlanta, through the western parts of South and North Carolina and back to the junction of the rivers in Loudon Country, Tennessee, circles about the very heart of Appalachia. Here DeSoto found a most agreeable climate lush with an abundance of growing things—maize, fruits, nuts and grazing land. Here DeSoto camped at towns situated on islands in the middle of the Tennessee River both above and below Chattanooga. Here he found town after town and province after province bearing names. Here he found tribe after tribe cultivating the land. Here were buildings and temples decorated with intricate carvings inlaid with pearl. Here he unknowingly passed an anciently worked gold mine at Dahlonega—a mine only re-discovered by settlers in 1802, unknown to Indians then living in the area. Here once existed the most important ancient palace at Etowah immediately north of Atlanta. Here he came to a region identified by him as Apalache.

Questions may well arise as to whether or not DeSoto knew where he was going. It would appear that he did. Although DeSoto presumably was the first European to explore this territory, ample intelligence would have been available to him—information not recorded by modern historians—but information that circulated freely amongst mariners and fishermen not formally set down in journals but rather passed by word of mouth or entered in such places as a ship's log, a sea-card or nautical chart which seldom, if ever, found its way into any library.

Other than diaries such as those of the Fidalgo of Elvas and Ranjel, our only source of information telling of that vast Sea of Darkness, comes from navigational aides—charts and maps many of which, like the Piri Re'is Map, have only recently come to light. In the following chapter we plan to examine more closely several of these nautical charts and maps showing the western Atlantic and particularly islands, including the island of Antillia, to determine if we can how early this information circulated throughout the Mediterranean and how much of the interior might have been known to both Columbus and DeSoto before they sailed out. How far back does the legend of the Seven Cities of Antillia extend—it was already a legend in the time of Columbus.

ANTILLIA

CHAPTER III

Medieval maps and particularly nautical charts are a fascination picturing as they do odd bits of fact and whimsy known best to mariners. On most of these medieval charts, islands in the Atlantic, of which historians find no documentary record, have been brushed aside as being purely mythological or non-existent. Three of these so-called mythological islands persistently appear on early nautical charts of the Atlantic—St. Brendan/Brandini; Berzil/Branzillia and Antilia/Antillia.

Brazil is pictured as a globe on all charts, green with a band of yellow encircling the middle on which the name is written. This ancient island has been symbolically perpetuated by modern Brazil in its traditional flag which pictures the ancient island as a globe. The legend of St. Brendan is best illustrated on the Piri Re'is Map with a marvellous sense of humor. Brendan himself is shown sitting on the back of a whale in the North Atlantic sharing his lunch with the most angelic looking young siren—his dhingy tied to the whale and his ship in the background with three awe-struck monks peering over the side. No documentary record could possibly portray a legendary episode more eloquently. The island of Antillia is usually drawn on these charts as a long narrow island distinguished by two projections at the bottom, situated far to the west and considerably larger than other islands.

Perhaps the most intriguing of all ancient or medieval maps is the recently found Piri Re'is Map showing islands in the Atlantic but more importantly mapping a portion of the south eastern coast of North America and the entire east coast of South America and including the Palmer Peninsula of Antarctica. This map was drawn by the distinguished geographer and Turkish Admiral Piri Re'is. It turned up quite unexpectedly in the archives of the Topkapi Palace and harem in 1929 when that sprawling complex of buildings was converted into the National Museum. This now famous map, drawn on gazelle hide in 1513, only a portion of which is presently known, contains extensive marginal notes several of which indicate that Columbus had knowledge of the same information that Piri Re'is possessed.

At the time this parchment document was found, Turkish authorities realized that it might prove to be important and consulted Prof. Paul Kahle, a German orientalist then visiting Istanbul. Result of their investigation was made known in a paper presented before the XVIII Congress of Orientalists held in Leyden in 1931. Following that meeting, the Society for Turkish Historical Research submitted an article to the *Illustrated London News* which was published on 23 July 1932 creating wide public interest particularly amongst geographers. However, historians doubted that Columbus had had access to earlier maps and so declined to accept the Piri Re'is Map. With that pronouncement, interest terminated. Following on the heels of these discussions, World War II intervened and it was not until 1956 when the map again came to attention. This time an Officer of the Turkish Navy brought a copy to the Hydrographic Office of the United States Navy for examination and interpretation. M. I. Walters of that Office, interested in ancient maps, brought the Piri Re'is Map to the attention of Capt. Arlington Mallery, also a student of

ancient maps, and together they checked its accuracy. On 26 August 1956, Georgetown University broadcast results of their study making available to scholars all over the world this most remarkable historical document.

Piri Re'is tells us that he compiled his map from some 20 or more earlier maps and charts dating back to the time of Alexander the Great—about 350 B.C. His marginal notes are voluminous. Pertinent facts scattered amongst those notes relate to Antillia and to Columbus that indicate common knowledge throughout the Mediterranean. Piri Re'is places the island of Antillia on the far side of the Atlantic where he says the sun sets. In this western region he has drawn beautiful parrots and macaws perching on rhumb lines and telling us these birds come in colors of white, red, green and black. But more importantly he assures us that Columbus had in his possession a book containing maps showing the western Atlantic, its coasts and islands and noting precious stones and metals to be found there. Columbus, so Piri Re'is states, after studying this book carefully, went to Genoa and explained these matters to important personages there requesting from them both ships and money—which he failed to get. Since Piri Re'is dated his map in 1513, a date contemporaneous with Columbus, and since he himself compiled his map from some 20 or more others going back to Alexander and was himself familiar with gossip circulating around the Mediterranean, we believe his marginal notes to be factual—that Columbus likewise possessed this same information.

Maps are a form of picture writing. They convey information concerning location or direction without the use of words or letters. Like other forms of picture writing, maps can be traced back into dim recesses of antiquity. Piri Re'is told us his map was a compilation. Anaximander of Miletus is credited with publishing the first map of the earth's surface sometime around 350 B.C. A copy of this map in bronze was taken to Sparta but the king rejected it and so became lost to history.

Maps of cities, rather than global, pre-dated Anaximander by a thousand years and more appearing in the Near East and China as early as 1500 B.C. Samuel Noah Kramer recognized such a map dug up by archaeologists of the University of Pennsylvania about 1880, that faithfully laid out the ancient Sumerian city of Nippur. Dr. Kramer noted that the map of the city was accurately drawn to scale and measurements checked in accordance with archaeological findings. Letters attached to names of city gates, the canal, the central park and other features were written both in Sumerian and Akkadian—Sumerian then being a dead language. Such a bilingual map in all likelihood would have been copied from an earlier source dating probably to the middle of the third millenium B.C., roughly around 2500 B.C., when Sumerian was in common usage.

Nautical charts present a totally different situation from land maps for distance over water raises problems not encountered on land. On land mileage can be stepped off, as was customarily done by Roman Legions—but by sea, no such stepping off is possible. Anciently, a sailor computed his position north and south by the sun or stars but, lacking a chronometer, he had no means at his disposal to reckon distance or position east or west—he had no fixed point to which he could turn.

According to Ptolemy, the first nautical chart was made by Marinus, a Greek living in Tyre, about 100 A.D. Pausanius tells us that sailors gathered at favorite places of talk—the Diolcus, the hawl-across at Corinth—and here distance and other vital information could be exchanged and verified. Out of this welter of compiled data emerged the Greek periplus. Each succeeding generation adding to existing knowledge, refining and exchanging information for

to these men of the sea this was a matter of life or death—a question of survival. As time wore on the old periplus gradually changed into the medieval protolano—a special guide to navigation primarily between harbors but which also included sea-crossing. These portolanos were made by seamen for seamen and were utilitarian in purpose. Transition came—from portolano to drafting board and a more formal map. Out of this chain of events, our modern map was born.

In the early days, sketches had been made on the spot by men who themselves had been there but from this time on it was a draftsman or cartographer who reduced to parchment sketches and information furnished him by others. Due to a draftsman's lack of familiarity with distance between ports, correlation or scale, many geographical features bore little resemblance to actuality—size, distance or relative scale then became largely a matter of guesswork. This guesswork proliferated as one cartographer copied from another with maps and charts of the medieval period evolving as vicarious compilations.

Original maps and charts in their entirety perhaps have never existed since ancient days. On the other hand, specific detail within each of the later maps may well have been an original contribution—refined by later observation—and it is just such a contribution that we wish to consider here—specific coast line on the south of the island of Antillia as it appears on two charts that of Andrea Bianco of 1436 and the Nautical Chart of 1424.

The earliest suggestion of Antillia is on a chart believed to be that of Pizzigano of 1367. The earliest known chart showing the island and identifying it with the name Antillia is the Nautical Chart of 1424, the original of which is in the possession of the University of Minnesota, and which also may be attributed to the Pizzigano family. Andrea Bianco has to his credit a world atlas of 1436 comprising

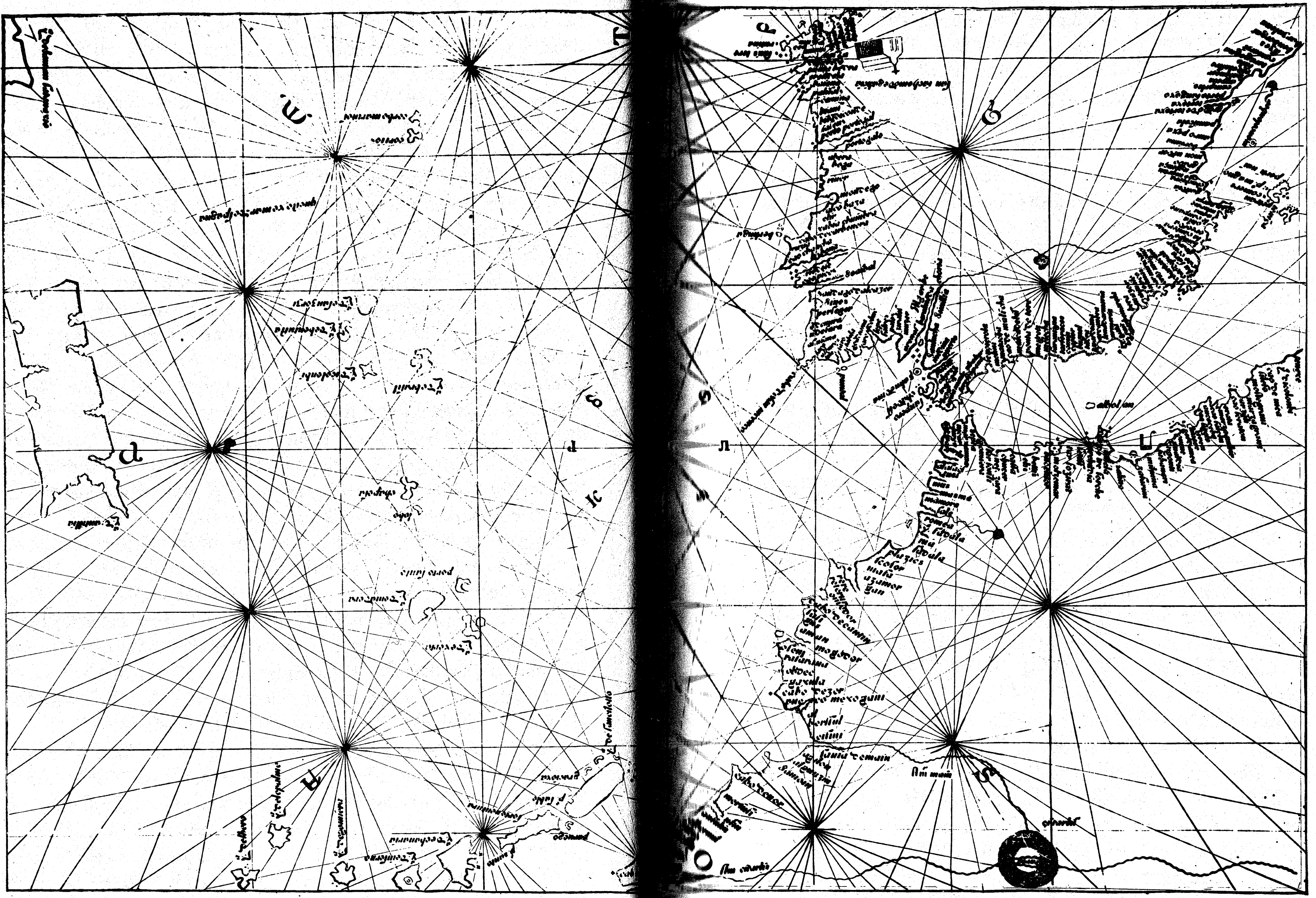


Plate IV Map of Andrea Bianco, 1436

Photo Newberry Library

some seven regional charts, as well as the famous one of 1448 which in later days stirred considerable controversy. The fourth map in Bianco's world atlas charts the North Atlantic and includes the coasts of Spain, Portugal, North Africa as well as islands in the western Atlantic including Antillia.

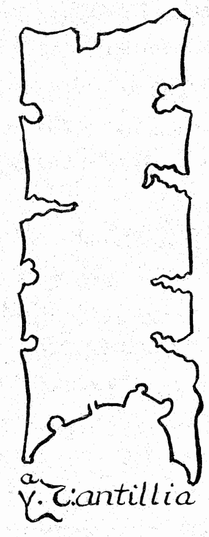
This fourth map is of paramount interest and we therefore shall trace it in minute detail. Antillia, long, narrow and of considerable size has a southern shore line quite distinct from that of the 1424 Chart or of any map or chart. It is unique. While most other shore lines have been copied from earlier sources, the southern coast of Antillia differs radically from other coast lines even of this same map indicating that information conveyed to Bianco may well have come from a carefully detailed portolano—notes and sketches of an eye-witness—one who had sufficient command and knowledge of cartography—and thus this southern segment appears to be an original contribution added to an already existing more ancient map and therefore not a copy.

In size, comparable to Portugal, and in position westward, Antillia as shown by both Bianco and the 1424 Chart is significant for it has in no wise been confused with the Azores as it was on the now discredited Vinland Map of 1440, but instead we find it located far out to the west. Islands of the Azores appear microscopic in size by comparison, indicating that the magnitude of Antillia was believed to be considerably greater than that of an ordinary island and was of importance. On Bianco's 1436 map, Antillia falls into a latitude about 32°N. to 39°N. and roughly 55°W.—a latitude and longitude much the same as the eastern portion of the United States.

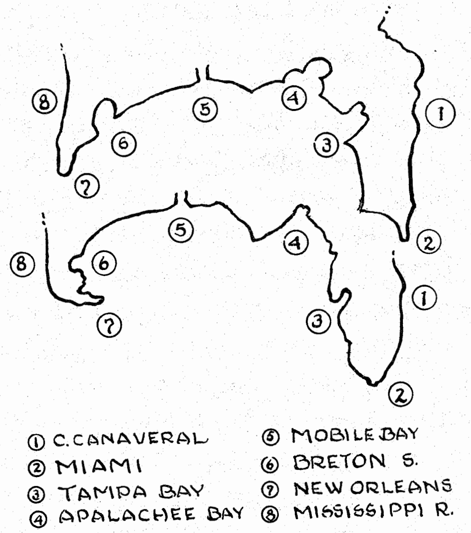
When we first examined Bianco's map, we were amazed at the striking similarity of the southern shore of Antillia with the Gulf Coast of the United States from Florida to

New Orleans. Possibility immediately existed that such might be fact when considered with the distance west of the Azores, the magnitude of the land mass, the latitude north and south and that this southern shore appeared to have been drawn with great sensitivity—an eye-witness observation.

We should like to set forth in detail the mile by mile study of this southern coast of Bianco's map which was undertaken arbitrarily starting on what would be the southeast coast of Antillia corresponding to the region where Jacksonville, Florida now stands. As a matter of convenience, proceeding south from this point, a "hump" noted by Bianco may well be the hump at Cape Canaveral which lies south in an analogous position from Jacksonville on the Florida east coast. Continuing south to Miami and the tip of Florida, then rounding the peninsula, turning northward, this peninsula would form one of the two large projections that first led us to an identification. Continuing north, Bianco shows a large bay which from its distance north from the point and the nature of its contour, strikingly resembles Tampa Bay on the Florida Gulf Coast directly opposite the "hump" at Cape Canaveral. Moving northward from Tampa Bay to the north end of this projection on the west, Bianco notes another bay having within it two smaller bays. This correlates with the double Apalachee Bay due south of Tallahassee—the Apalache bay where both Narvaez and DeSoto camped. While Bianco mapped this double bay somewhat oversize, he probably derived his information from sketches made by an observer who, in keeping his notes, paid no attention to scale and Bianco, as draftsman, would therefore have been handicapped in determining any relative scale in assembling the parts from the observer's notebook sketches. Travelling westward along the coast, a small cape is shown, smaller than actual—its undersize again due to the lack of a com-



Map of Antillia as drawn by Bianco



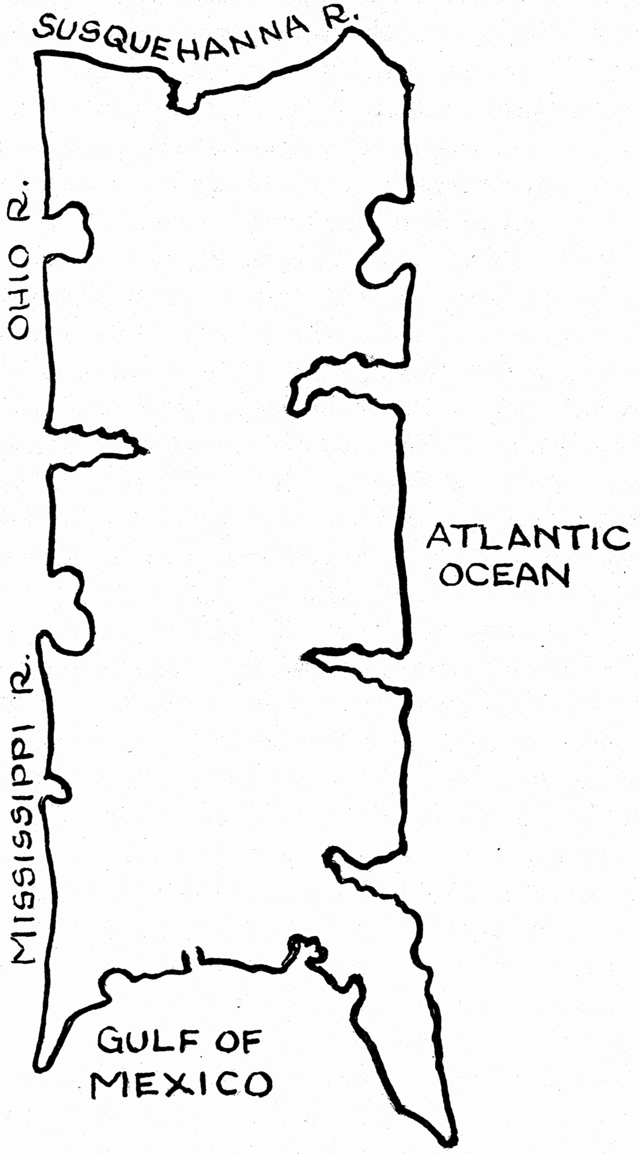
Detail, South Coast of Antillia

parative scale. Beyond this cape, a significant detail in mapping occurred—a detail of omission rather than of commission—for the map shows a bay with its upper end open and unconnected. This bay lies in a position analogous to that of Mobile Bay. At its northern end, Mobile Bay has two wide river mouths emptying into it with an irregular series of finger-like channels occupying the entire space between the two rivers. That the shore line on the map had been intentionally left open is a matter not to be lightly brushed aside for, in 1436, the northern limits of the bay had not been determined by the first observer therefore that line was left unconnected—a rare detail in mapmaking that removes it from the realm of coincidence and bespeaks an eye-witness observation. Leaving Mobile Bay heading west, another large bay is shown before turning south to the tip of the second projection on the southwest. This bay appears to be Lake Borgne coupled with Lake Ponchartrain with the projection itself corresponding to the long spit of land fanning out south of New Orleans forming the delta of the Mississippi River. These two projections, characteristic of Antillia on all maps, would thus be the Florida peninsula and the delta of the Mississippi. Within these two projections, all features as they exist today, can be found. This is the land traversed by Cabeza de Vaca and DeSoto seeking in this very region the Seven Cities of Antillia. This is where they came. Both knew Apalache Bay and this medieval map would have been available to them.

While it was this southern shore line on Bianco's map of Antillia that instantly attracted our attention, the remainder of the boundary of the island must be understood to be conjecture for definite eye-witness detail is lacking and this portion appears to have been a copy of an older map. However, in spite of lack of detail, enough remains so that the area can be determined and we shall follow around the boundary. From the southwestern tip of the projection formed by the Mississippi delta, the contour line turns sharply north which, if we left the Gulf Coast at New Orleans, the turn north would proceed inland by way of the Mississippi river system. If such a water course by river could be followed eventually coming out into the Atlantic, this then might well be the fabled island known in medieval times as Antillia and known to Plato as Atlantis.

The western boundary of Antillia on Bianco's map runs straight north with little variation paralleling the course of the Mississippi to present day Cairo. A short distance from the bend at Cairo, the Ohio joins the Mississippi and if an exploring party followed up the Ohio rather than due north up the main river, a water course would bring them to Pittsburgh where the Monongahela and Allegheny join to form the Ohio. At this point, the map turns abruptly east. Due east of Pittsburgh, the Conemaugh, a tributary of the Allegheny, today connects with the West Branch or the Juniata, tributaries of the Susquehanna, over a short portage of some two miles immediately southwest of Altoona—locally known as Horseshoe Bend—and from there the water course continues down the tributary to Harrisburg where it joins the Susquehanna and on out into the Atlantic Ocean at Chesapeake Bay. Southward from Chesapeake Bay, now in the Atlantic, the line bounding the island of Antillia connects with our starting point on the Florida peninsula at Jacksonville thus circumnavigating for some 3000 miles the long narrow island whose distance around Plato gave as approximately 3000 miles. Other than the short portage at Horseshoe Bend, this entire waterway is navigable today by small craft—a true island as it was known anciently—unrecognized as such today.

When modern man pushed into the interior from Chesapeake Bay sometime late in the 17th century and up the Susquehanna beyond Harrisburg, two important stone



Map of Antillia located geographically

markers had been discovered—one standing near the old site of Frank's Town and the other just beyond Huntingdon, marking the proper fork of the river at the confluence. Huntingdon stands today on a site which in Revolutionary War times was known as Standing Stone. Here at this spot an ancient stone marker once towered on a promontory. Amazed explorers described the stone as an obelisk—fourteen feet high, broad of base, tapering to six or seven inches at the top, covered on all four sides with undecipherable letters, believed by some who first saw it to have been Egyptian hieroglyphics. This stone has frequently been mentioned in Pennsylvania archives—the original disappeared about 1755. This is only one of a great many recorded standing stones that earliest travellers and explorers found marking the trail from the Atlantic to the Ohio by water—a trail of standing stone markers found as far west as Lancaster, Ohio. Diaries of various early wanderers through this then wild region—David Zeisberger, Conrad Weiser, George Groghan, Hechwelder, Gist and Peter Kalm—all faithfully testify to these standing stone markers having been there before their own time.

Here at this almost imperceptible portage near Altoona, will be found the very core of our story. This was the island identified on medieval maps and charts as Antillia. In a more ancient day, this portage was non-existent for the two rivers, Susquehanna and Allegheny connected, the join at Horseshoe Bend having been silted up at a later day creating the portage as we know it today.

Along the entire length of this inland waterway could be found not alone an abundance of food—wild geese, turkeys, fish, nuts, berries, fresh spring water—but even more important, a thickly settled region whose inhabitants could provide a traveller with necessary logistics—means of travel, distance to be covered, hostile or friendly tribes that might be encountered and main sources for food. From the

earliest known times, along the entire length of the Mississippi and its tributaries, lived one sedentary tribe after another. Here were the Mound-builders. Here on this great island lived the prehistoric Muskhogean family, a group which excelled in agriculture and hand crafts—their territory comprised the entire region as we have just bounded it. Here carbon-14 dates go back of the Christian era to as early as 12,000 B.C. with a large proportion falling around 2000-1000 B.C. Here any exploring party of the 16th century A.D., would have found historic tribes of Indians—Creek, Cherokee, Seminole, Choctaw—living along the entire course of this inland waterway.

Earlier, we noted that Antillia was also called the Island of the Seven Cities. We carried knowledge of Antillia back to 1424/1367 through charts of Bianco and the Pizzigano family. As we proceed back in time from Columbus and DeSoto, we should like to call attention to the Martin Behaim Globe of 1492, which will be discussed in the following chapter. This Globe steps our knowledge of the Seven Cities back some 700 years roughly to 734 A.D., linking the fabled island of Antillia to the legend of the Seven Cities.

THE MELUNGEONS

CHAPTER IV

In the early 1950's, Armando Cortesao then on the staff of UNESCO, spent several years studying the perplexing question of Antillia, tracing knowledge of this elusive island back as far as he was able. He was convinced that ancient peoples, Phoenicians and Greeks, sailed far into the Atlantic eventually reaching the Antilles and the American continent. He felt that if this could be admitted, as he was convinced that it should be, then we could better understand references of so many ancient authors to oceanic lands far to the west beyond Gibraltar. Dr. Cortesao retold the following story published earlier by Ernest Ravenstein in his *Martin Behaim, His Life and Globe:* "Martin Behaim's globe of 1492 shows an 'Insula Antilia Septa Citade' accompanied by an inscription which is: 'In the year 734 of Christ, when the whole of Spain had been won by the heathen (Moors) of Africa, the above island of Antilia, called Septa Citade (Seven Cities) was inhabited by an Archbishop from Porto in Portugal, with six other Bishops, and other christians, men and women, belonings and goods. In 1414 a ship from Spain got nighest it without being endangered.' "

Dr. Cortesao continued: "According to Fernando Columbus, his father also knew the legend and it influenced his considerably. He says that Christopher Columbus had gathered information in Portugal particularly about that

island called Antillia which lays 200 leagues westward of the Canaries and the Azores. The Portuguese thought it was the Island of the Seven Cities which according to tradition was colonized in 714 when of the Moors invasion, and they say many things about it."

One of the more detailed accounts of this medieval legend of the Seven Cities may be found in the work of Ludwig Schwennhagen—*Antiga Historia do Brazil.* As he related this story, the first document in the Chronicle of the city of Porto Cale (Oporto), Portugal, was written by a Catholic priest about 740 A.D. This Chronicle told of the destruction of Lusitania. The Archbishop of Porto Cale refused to submit to domination of the Mohammedans and deliberated with them in order to avoid humiliation for the Christians. At that time Portugal had extensive maritime resources as well as skilled pilots who recounted glowing tales of a great and beautiful country far to the west on the other side of the Atlantic Ocean. The Archbishop of Porto Cale listened. Then, after consulting with other Bishops, the Archbishop of Porto Cale, together with six of those Bishops, resolved to go. Thousands of their faithful followed. The expedition left in 734 accompanied by more than 5000 followers. The Chronicle relates that the fleet arrived safely and thereafter many others prepared to follow—all migrating to the large island of Antillia.

Many other accounts such as that of Bartolome de las Casas in his *Historia de las Indies* offer additional information. Samuel Eliot Morison likewise told the story of the Seven Cities of Antillia, treating it in his usual cavalier manner making light of any historical legend that would dim the lustre of Columbus. His irony is nowhere more apparent than in his fabrication of a Committee of Portuguese each standing on an island in the Antilles saying to Columbus on his arrival there: "Welcome to asay, ary or jaysos." Morison apparently felt that it was necessary to defend his position that Columbus had no knowledge of this region and was first to discover America.

What we gather from these various versions of Antillia and the Island of Seven Cities, is that during the Moors' invasion of Spain in 711 A.D., thousands of Christians were slain and the Archbishop of Porto Cale in Portugal, fearful for his own flock, joined with six other Bishops and together with their congregations, sailed out under the guidance of mariners to an island across the Atlantic which they knew only as Antillia. On reaching the safety of that island they founded seven cities each one under their own Bishop and each probably named their new settlement after the home they left as would be customary–Cale after Cale. Referring back to DeSoto's expedition some 825 years later, searching for these same Seven Cities, the first important town he reached after landing on the Florida west coast, was Cale. This name was recorded by both the Fidalgo of Elvas and Ranjel. It was the Port of Cale from which the Archbishop sailed and from which the 5000 or more came. That name on this spot could hardly be coincidental. We also learn that a ship made contact with the descendants of the original group who still were Christians and reported back to Spain in 1414. Knowledge had not been lost in the intervening years between 734 and 1414–or 1492–and it was this group that both Columbus and DeSoto sought.

DeSoto proceeded to Anhayca Apalache and thence upriver travelling by the Flint River fork of the Apalachicola rather than the Chattahoochee fork. Had he taken the Chattahoochee it would have brought him directly north of Atlanta and saved him months of aimless wandering circling an area he obviously hoped to find. In fitting the mosaic together, we are of the opinion that DeSoto probably followed the wrong river fork.

If some 5,000 persons, men, women and children, cattle

and household goods left in a convoy of ships from Portugal guided by astute mariners, the chances are better than even that at least some ships would have reached the island. Sailing into the Atlantic out of Oporto, the ships would have come into the Canaries Current, one of the many currents that combine to form the circling Gulf Stream and probably all, or the greater number, of ships might well have landed within the Caribbean or Gulf of Mexico where the current would have carried them. That one group landed in Florida, making settlement at Cale (Ocala) appears reasonable. If at some later day members of that group travelled north along the Apalachicola taking the Chattahoochee River fork rather than the Flint River taken by DeSoto, they would have found themselves north of Atlanta and in the fertile land of the Muskhogeans and so able to survive through the centuries.

We would like now to consider the possibility that some survivors or direct descendants of that original group who left Portugal might be ancestors of an isolated group tucked away in a remote valley of Appalachia back of Newman's Ridge along the Clinch River at Sneedville in northeastern Tennessee–an enigmatic people whose origin appears unknown but known to us as Melungeons who are reported to have settled here long prior to the Revolutionary War. These strange people have always insisted that they are Portuguese and Christian. Their traditions confirm the fact that they may be descendants of those 5,000 who sailed out of the western Mediterranean under guidance of mariners to the New World centuries before Columbus.

This very group had been scrupulously studied by anthropologists and historians–their craniums carefully measured and blood samples taken but other than that they appear of Mediterranean ancestry, no one has yet determined who they are, where they originally came from or when. While the Melungeons themselves state that they have always been Christian and came here centuries before Columbus, they do not remember how many centuries. Some individuals have believed them to be Welsh who came with Prince Madoc, others assumed them to be deserters from DeSoto's expedition, some thought they were Jews, others believed them to be refugees from Sir Walter Raleigh's lost colony at Roanoke but when all the racial and ethnic theories failed, the people themselves still maintained they were Portuguese and Christian who arrived here many centuries before Columbus and refuse to be identified with any other race or religion. Why is it that they cannot be as they themselves believe? Why must they fit into an anthropologist's preconceived opinion? Instead of telling these people who they are, why is it that we cannot listen to the people themselves? These are the persons Morison so facetiously referred to as the "Portuguese Welcoming Committee."

Back in 1784, John Siever, an early traveller into these parts, wrote that he found a dark-skinned people in Hancock County who were neither Negro nor Indian and who told him they were of Portuguese descent. The name "Melungeon" is thought to derive from the Afro-Portuguese word "melungo" meaning shipmate.

If some slight possibility existed that this group of Melungeons were remnants of that group of 5,000 who set out so bravely in 734 from Porto Cale to Antillia, the only sensible course would be to go and find out. I therefore flew down to Kingsport in northeastern Tennessee to ferret out as much information as might be remaining. There being no public transportation to Sneedville, a taxi-man agreed to take me there. We drove some seventy miles, the last forty over a one-way gravel and dirt road winding around three mountains, seeing no one, passing no cars and finding no road signs—and this being the only north-south road through this entire region. After six hours of travel,

arriving after dark and somewhat weary, finding the one small hotel closed, I was taken in and given room and board by Mrs. Bess Jaynes, a most gracious and hospitable lady. Her ancestors were among the first white settlers to come over Cumberland Gap into these mountains.

Since World War II, the younger generation left this region to work in industrial centers for no industry comes to Sneedville. One zinc mine that did exist closed down several years ago. Only a few of the older generation remain and many had intermarried with later comers into the valley. In the early 19th century, about 350 of these olive-skinned people lived on Newman's Ridge, their racial history at that time being veiled in mystery. Insofar as presently known, only one matriarch still adheres to her ancient heritage. Miss Martha Collins, President of the Citizens Bank of Sneedville, took me out one afternoon to interview Bertie Bell, now in her 80's, who lives in one of the most remote hide-aways at the far end of Snake "Holler," and who still insists that she is "Port-oo-gee." To reach her tiny cabin we drove some seven miles beyond Sneedville, back of Newman's Ridge, winding along dirt roads bordering the Clinch River. The valley was incredibly beautiful with low mountans covered with luxuriant foliage and as we drove, gaunt chimneys, remnants of fireplaces of a bygone age that once were houses, stood towering amongst fields of tobacco. Bertie Bell was shy and it took some time for her to accustom herself to a foreigner—and even this would not have been possible had it not been for Miss Collins, one of her own people. Strangers are not welcome. This is traditional "moonshine" country where unless one has been born here, he is a foreigner or a "revenoor." We spent the better part of an afternoon with Bertie as her story came very slowly. She told me that her people were Christians and came to these parts many many years before Columbus but she said none of her people knew how many years before. When she had finished, I told her that I believed her story, that history confirms the legend of Portuguese Christians who crossed the Atlantic more than 700 years before Columbus. She looked at me in utter disbelief. She had been told many times before that her story was nothing more than a fairy-tale—that she was wrong. It was hard to explain to these people the more ancient legend in a manner that could be readily understood but I could only assure them that history did record the fact and that they evidently were direct descendants of that early group of Portuguese who sailed out from Porto Cale in 734 A.D. I believe they are. These are the Melungeons, "ship-mates" who first landed at Cale, one group of which apparently migrated over the centuries coming north by way of the Chattahoochee and later settling along the upper reaches of the Clinch River in northeastern Tennessee—a people lost in tradition in these mountain recesses, the last remaining vestige of that original group who founded one of the Seven Cities of Antillia some 1200 years and more ago.

KEFTIU BEARING COPPER

CHAPTER V

In stepping back in time, we should like to digress in this chapter to look into ancient mining of copper as it occurred throughout the Mediterranean and in America since it has bearing on our story.

Many are the ancient authors who related tales of a vast land across the sea. Josephus, in his *Wars of the Jews*, tells us: "But they carried their arms beyond the ocean to another world unknown to them before." Theopompus recounted a conversation by Silenus in which he spoke of Europe and Libya as being washed by the same ocean but there was one continent which was outside these limits and its expanse was immense. One of the more extensive descriptions of this island came from Diodorus Siculus who noted that an island of considerable size lies out from Libya a number of days to the west—a land fruitful and of surpassing beauty.

In the preceding chapter, we carried knowledge of Antillia back to 734 A.D. Earlier records of this legendary land, particularly those of Carthage, had been lost when its famous Library was burned by the Romans. Knowledge, on the other hand, had been kept alive by seamen who continuously sailed to these distant shores on expeditions of one kind and another. That these mariners handed down no formal records is understandable for many sailed but few could write. A century or so before the Christian era, Carthage itself had prevented knowledge from filtering through for fear that others would siphon off her lush trade which she wished to hold for herself. That great gaps in written records from 100 B.C. to 700 A.D. occur, is understandable.

Plutarch's *Morelia* written in the first century of the Christian era, tells of an island at a distant point beyond Britain which then was difficult of access due to mud brought by a multitude of rivers which coming from the mainland discharged themselves raising great bars that choked up river mouths and rendered them hardly navigable. Anciently, he tells us, the coasts of this continent lying on the sea had been inhabited by Greeks and it was believed that those who came were with Heracles and had been left here by him. He tells of the dangers of the vast sea, that the sun is scarcely hidden for one full hour during the space of thirty days and that this is their night of which the darkness is small.

From Plutarch's story, it appears without doubt that more ancient persons, Greeks, came first to Britain, then followed a northern course—a course we identify as the "great circle route" which in mileage over open water is considerably less than the southern passage by way of the Gulf Stream current and, in midsummer by the northern route, they had almost continual daylight. Plutarch notes that mud then choked river mouths hampering navigation into the interior. Plato in writing of the "lost Atlantis" likewise told us that after the earthquake and flood, mud choked river mouths making sailing difficult.

A thousand years before Plutarch, before Josephus and before Diodorus, bardic tales of Men of the Isles of the Sea rise up to haunt us—from dynastic Egypt where these men of the sea were known as Keftiu, from Minoan Crete and Mycenaean Greece where they were known as Phoinikes—"Red Men." These Keftiu or Phoinikes appear on Egyptian

wall-paintings carrying ingots of copper on their shoulders. A unique race, indicated by their color red (Keftiu) had been brought to their shores so we are told by roving Phoenician seamen. Red-skinned Keftiu have provoked more than their share of controversy amongst scholars. Where did these red-skinned Keftiu come from? What about the copper ingots they carried? Why had it taken three years for skilled Phoenician sailors to make a round trip to get this copper and bring back the Keftiu? The only information given in Egyptian records is that they were red men from the Isles of the Sea.

Sir Arthur Evans, authority on Minoan civilization, discussed these Keftiu at some length. Said Evans: "The wall-painting of the Cup-bearer for instance, exhibits to us for the first time in his Cretan home a representation of the enterprising Aegean race known to Egyptians as the Keftiu or Kefts, so frequently depicted on tombs of that period as bringing offerings to the Viziers of Thotmes III and Amenhotep II. More than this, the characteristic outline of the copper ingots borne on their shoulders by some of the Keft Chieftains reappears on a series of inscribed tablets from the Knossian Palace, while a horde of nineteen of the ingots themselves was actually found in a repository of the Royal Minoan Villa excavated by the Italian Mission. There is evidence that the Greek name Phoinikes of 'Red Men' once had a wider significance . . ." Thus according to Evans, Keftiu were not Minoans of Crete.

Another British authority, H. R. Hall, late Keeper of Egyptian and Assyrian Antiquities of the British Museum, devoted considerable time to study of Kefts. He believed that they were Minoan. Said Hall in analyzing a tomb fresco: "The distinction between the Minoan and three Asiatics that precede him, in all characteristics of ethnic type and clothing, is most marked; in complexion too he is, as usual, a deep red, almost like an Egyptian, not yellow like a semite. These Minoans are described on Rekhmire's tomb as men of Keftiu or Kaphtor and the 'Isles of the Sea' and from their appearance it is evident that Crete was included in the designation 'Keftiu.' It has been argued that Keftiu and 'the Isles' are two different things, 'the Isles' being Crete and the Aegean, while Keftiu was Cilicia, because Keftians are sometimes represented as bringing Syrian Vases to Egypt. But we have no valid reason to dichotomize the expression 'men of Keftiu and the Isles of the Sea' by which all obvious Minoans of Rekhmire's paintings are described. Which of these are Men of the Isles and which Keftiu? All are Minoans."

To which Evans, an authority on Minoans, strongly disagreed.

These two outstanding authorities—Evans and Hall—hold diametrically opposing views concerning these red-skinned Keftiu from the 'Isles of the Sea' who came bringing copper. Since there exists normal disagreement amongst scholars, it may not be out of order to examine each portion—Isles of the Sea; Red Men; copper or Red men from the Isles of the Sea bearing copper.

Insofar as Isles of the Sea have been described as being at some distant point since the far-sailing Phoenicians took three years to complete a round trip and since the island of Antillia was likewise said to be at a distant point in the Atlantic Ocean, we believe that possibility exists that Keftiu may have inhabited that island.

The human family divides itself into certain colors: black, white, red and yellow, each with a known traditional home—black in Africa; white in Europe; red in North America and yellow in Asia. If we have "red-men" or Keftiu, is it not logical if red men do in fact exist, to look to a region where red men are known to be? Every spot on the globe where they did not exist, or were known not to

have existed has been microscopically combed over. If red men in fact existed in North America, regardless of how improbable the situation may appear, question must arise and be settled as to whether or not these red men were the Keftiu of Egyptian records—Red Men from the Isles of the Sea bearing copper ingots on their shoulders. They can not be summarily dismissed by denying their existence for their existence and place of habitation speaks for itself.

Since Red Men were said to have been transported by Phoenicians to Egypt, bearing copper, then in the region of North America which Red Men were known, can copper be found? Yes, copper is found in almost unbelievable quantity throughout North America and specifically in one area where ancient mining took place on the Upper Michigan Peninsula and on Isle Royale. At this particular site, carbon-14 tests were made on charcoal taken from a mined pit which gave readings dating from 1800 B.C. to 1000 B.C. This precise mine is located on Isle Royale in Lake Superior. Organic matter excavated in 1953-54, by Dr. Roy W. Drier, Metallurgical Engineer, then on the faculty of the Michigan College of Mining and Technology, under grant from the Wenner-Gren Foundation, produced a date reaching back 3000 years.

Here on Isle Royale and on the Upper Michigan Peninsula, 500,000 tons of pure copper (one billion pounds) had been mined out according to estimates of metallurgical engineers. This incredible amount of copper has not been accounted for by American archaeologists—the sum total according to archaeological findings here in the states amounts to a mere handful of copper beads and trinkets—float copper. Five hundred thousand tons of pure copper does not disintegrate into thin air—it cannot be sneezed away—it must be somewhere and, to date, it has not been located in the United States. While disagreement was noted between Minoan and Egyptian authorities as to origin of

Keftiu, just so disagreement runs counter between metallurgists and archaeologists as to the tremendous tonnage of copper anciently mined out. The Trap Range in this Copper Country extends roughly for 140 miles through Keweenaw, Houghton and Ontonagan counties as well as on Isle Royale with varying widths of from four to seven miles and with over 10,000 known mined out sites.

On the Keweenaw peninsula of Upper Michigan, some 100 years or so ago, at a small place called Laurium on Torch Lake not far from Calumet, a stupendous quantity of green carbonate of copper—nearly twenty tons of it—was unearthed from a storage pit. T. H. Lathrop, writing in 1901, told of this amazing find, stating in part as follows: "That pits along the lake were used for storage of copper there can be no doubt. By far the most interesting of these storage pits was that discovered by Edwin J. Hulbert in 1858 and opened by him in 1865. This pit was situated on the crest of a hill midway between the head of Torch Lake and Lake Superior now a part of the Calumet and Hecla No. 1 shaft. The pit was 50 feet in diameter, nearly circular in shape and the burrow formed of earth taken out extended for a distance of 20 feet all around. The pit appeared to have been filled and emptied on successive occasions with copper obtained from sources other than the conglomerate lode, the most likely source being the workings on Isle Royale.

"When the pit was opened it had a covering of earth four feet thick, well laid, and under this was a vast deposit of green carbonate of copper nearly twenty tons of which was taken out and sent to the smelting works at Hancock 14 miles away. Everything found in the pit tended to show that it had been partially filled with pieces of native copper for storage purposes. There was not found a single tool or implement of any kind although those excavating the pit found oblong birch baskets used for carrying copper to the storage pit. Centuries of time must have elapsed to have changed this native copper which the miners placed in the pit into the carbonate form. No better proof can be offered of the great antiquity of the working of these ancient mines than that presented by the opening of this ancient storage pit showing the changing of this great deposit from native copper to the green carbonate. In the history of the copper country this pit is unique. Nothing like it has ever been discovered before and nothing since."

Lathrop writing in 1901 about the opening of this vast storage pit on Torch Lake, realized the great antiquity of this mass of green carbonate of copper but he could not then know that some fifty years later Dr. Drier would have at his disposal the then recent discovery of carbon-14 testing by the Nuclear Physicist Dr. Willard Libby, which provided means for dating organic matter taken from these mined out pits on Isle Royale that would supply him with a date extending back 3000 years. Lathrop knew the carbonate of copper had been there many centuries but never would he have suspected how many. Twenty tons of pure copper placed in a storage pit for transport elsewhere. Where? Not located yet is the remainder of the 500,000 tons which metallurgists determined had been mined out and not accounted for by archaeologists.

Who were these ancient miners? From whence had they come? Why did they leave so abruptly with work half finished? No villages or houses have been found and it is presumed that they came only during summer months, the winters being too harsh. That they were skilled miners, industrious, persistent and hard working is apparent from the silent record that they left. Conjecture that they might be ancestors of the historic Indians has consistently met with objection. One of the more fascinating accounts of the first findings of ancient copper mines on Isle Royale appears in the Atlantic Monthly, Vol. XV, 1865, pp. 308-15, where an extensive report in part tells us the following: "I feel unwilling to leave this subject without instituting an inquiry relative to the time when these mines were wrought, and the people who worked them. Many who have been taught to regard the present roving tribes of Indians as instinctively wise in matters of medicine and mining, are ready to award that race the credit of having worked these mines; but inasmuch as even a traditional knowledge of their existence was unknown to the Indians at the time the Jesuit Missionaries visited the region in the sixteenth century, we incline to the opinion that another and distinct race worked them. I am unable to see why the descendants of a people residing in the same country, and subject to the same wants, should abandon the half-worked mines which their ancestors had opened, and even fail to hand down to their posterity a tradition of their existence. If copper was in such a demand that the ancestors of the present race of Chippewas were induced to work so perseveringly to obtain it, why did not the children continue to work at least enough to finish the jobs already started by their progenitors? We cannot consistently attribute the Herculean labor expended on these mines to the ancestors of the indolent race of North American Indians."

Two things stand out in early reports—the vast amount of labor and the fact that mining out was half finished and the miners appeared to have left very suddenly. With reference to the labor involved, one report stated that it would have taken 10,000 men 1,000 years, with the crude stone mauls as their only tool, to have accomplished the vast operation—another in reply stated even had it been 1,000 men working 1,000 years the time still would have extended back to the beginning of the Christian era. One report after another questioned why the work had been interrupted without completion. A Mr. Greusel observed that "tools lay around in groups as though the workmen

had left them down, gone home to dinner and never returned."

With only primitive means at their disposal, the miners demonstrated amazing skill in extracting copper from the vein. One report after another tells of the incredible size of the various masses that were recovered—5720 pounds of pure copper found on the Minong Mine property near McCargo's Cove on Isle Royale; a large mass found in the woods on the land of the Menard Mining Company had been worked at by the ancient miners and the top and sides had been beaten smooth by stone hammers, the marks of which were still visible—this mass weighed eighteen ton. Again quoting the *Atlantic Monthly*: "But the most interesting specimen was found in an old pit near the Minnesota Mine. In removing the accumulated leaves and vegetable moulds the workmen, at a depth of eighteen feet discovered a mass of copper ten feet long, three feet wide and more than a foot thick, weighing six tons. On removing the earth around the mass, it was found to rest upon skids, or timbers, piled up to the height of about five feet. These timbers, having been constantly covered with water, were in a good state of preservation, and the ends showed plainly the marks of the tool used in cutting them. This mass of copper, like all the others found in those ancient pits, was divested of all ragged points, and hammered perfectly smooth. There was nothing in its appearance to show that it had ever been cut from another mass, but upon clearing out the rubbish from the bottom of the mine, which was about twenty-six feet below the surface, a vein of pure copper was found from which this had evidently been taken."

No one yet knows who this hardworking enigmatic group of miners might have been. They came more than 4,000 years ago, apparently worked the mines for about 1,000 years then suddenly and abruptly disappeared—according to

Dr. Drier's carbon-14 test, about 1000 B.C.–leaving these tremendous masses of copper partly worked and, as observed above, the workmen dropped their tools, went home to dinner and never returned.

Another interesting observation was made c. 1914, by Prof. James Fisher of the Michigan College of Mining and Technology: "Copper was known to Egyptians as early as 7000 B.C., and bronze relics have been discovered dating to the early period of Menes, the founder of the First Dynasty, the first king of upper and lower Egypt, who reigned probably as early as 5500 B.C. Is there any more conjecture involved in assuming that the copper used by ancient Egyptians came from the Lake Superior region, the only place where native copper has ever been found in considerable quantity, than in assuming that these ancients were sufficiently advanced in the science of metallurgy to reduce the metal from its ores?"

Why indeed should there be any more conjecture involved in assuming Lake Superior copper was used by ancient Egyptians and Greeks? Wall paintings and inscriptions telling of Keftiu–Red Men from the Isles of the Sea bearing copper–spin back to dynastic Egypt in periods of time from 2000 B.C. to 1000 B.C. At this period of time, Egypt required incalculable amounts of copper for tools necessary in pyramid and temple construction; Greeks likewise stood in need of almost unlimited quantities of copper for copper lined the entire interior of such structures as the 50 foot dome of the Treasury of Atreus at Mycenae and that at Orchomenus–while roads leading into these magnificent edifices blazed with gleaming copper–so Schliemann found. Mines from Cyprus, from Crete, from Sinai or the Rio Tinto, produced low grade ore insufficient in quality or quantity by comparison with this fabulous production on the Upper Michigan Peninsula and Isle Royale. Many of these mines from the Mediterranean area

became exhausted very early and produced little of value.

Since copper is recorded in dynastic Egypt being brought from Isles of the Sea by Keftiu–Red Men–and stories from Homer, Plutarch, Josephus and Diordorus tell of this distant land, we departed from Plato in order to confirm knowledge of these isles as well as the existence of Red Men living in the precise region where ancient copper had been mined. We now pick up the thread of our story and return to Plato.

WAS EVENOR FOLSOM MAN?

CHAPTER VI

One of the more contentious points raised by the Dialogues is Plato's early date of 9000 years. Scholars questioned his veracity since it was assumed that at that early date man would have been incapable of transmitting or preserving knowledge lacking any means of communication or transportation. Theoretically, at that time, man had not yet emerged to a sufficiently civilized state. Plato, himself, while questioning much of the story, points out two different periods of time when these occurrences took place one at 9000 years before his time when more ancient people lacked ships as he states (Cri.113E): ". . . for neither ships nor sailing were as yet in existence" and a second period when triremes filled the harbors (Cr.115E): ". . . and their shipyards were full of triremes and all the tackling that belongs to triremes, and they were all amply equipped. . . . and thus they made their entrance from the sea like that to a harbor by opening out a mouth large enough for the greatest ships to sail through."

With reference to this early date, Plato further noted (Tim.23E): "Of the citizens, then, who lived 9000 years ago, I will declare to you briefly certain of their laws and the noblest of the deeds they performed." We are then told of the division of land on the island of Atlantis and names of the rulers (Cri.114A): "And to all of them he gave names, giving to him that was the eldest and king the name

after which the whole island was called and the sea spoken of as the Atlantic, because the first king who then reigned had the name of Atlas." Then Plato continued (Cri.114D): "Now a large family of distinguished sons sprang from Atlas; but it was the eldest who, as king, always passed the scepter to the eldest of his sons, and thus they preserved the sovereignty for many generations." And again (Cri.109D): "And of these citizens the names are preserved, but their works have vanished owing to the repeated destruction of their successors and the length of the intervening periods. For, as we said before, the stock that survived on each occasion was a remnant of unlettered mountaineers which had heard the names only of the rulers but little besides of their works. So though they gladly passed on these names to their descendants concerning the mighty deeds and the laws of their predecessors they had no knowledge, save for some invariably obscure reports; and since, more over they and their children for many generations were themselves in want of the necessities of life, their attention was given to their own needs and all their talk was about them; and in consequence they paid no regard to the happenings of bygone days. For legendary lore and the investigation of antiquity are visitants that come to cities in company with leisure when they see that men are already furnished with the necessities of life, and not before."

Plato thus accounts for the time intervening between the very early period of Atlantis when they had no ships and the many generations of sons who followed by noting that during these long intervening periods only remnants of unlettered mountaineers survived and their children for many generations were in want of necessities of life paying little or no attention to happenings of bygone ages. Plato then brings us up to the time when ships sailed. A long period of time intervened between these two periods that went unrecorded by Greeks—for the Egyptian priests told Solon Greeks at that time did not possess writing—but that these records had been preserved in Egypt.

Plato recognized two periods of time but critics rarely take the second period into consideration. Plato has been charged with recording anachronisms—he has repeatedly been accused of exaggeration and of multiplying both dates and measurements by a factor of ten. Four times Plato assured us that while he himself thought these matters questionable, yet they were historically true.

In separating out these two periods of time, we shall explore the possibility that man had a higher degree of intelligence 11,000 years ago than has been credited to him. Our own generation tends to assume that each succeeding generation has built upon the previous one and that if one gets far enough back, it would take only a few generations to regress to the so-called "stone age." We forget that in the third century B.C., Eratosthenes had correctly estimated the circumference of the earth at the equator to be 25,000 miles; that science at that time was more advanced than it was at the beginning of the 19th century of our own era. Much of the accumulated ancient scientific knowledge was lost with the burning of the Library at Alexandria and that at Carthage. Any iota that remained was quickly disposed of by the early Christian Church when it pronounced all Greek science as pagan and that the world was flat thus wiping out any vestige of ancient scientific knowledge that rightfully should have been our heritage.

Herodotus tells us in his Book II, that on his visit to Egypt, priests read to him from papyrus scrolls the names of three hundred and thirty kings successors to Menes, the first king. Taking three generations as equivalent to one hundred years, that would bring the line of Egyptian monarchs back 11,000 years before Herodotus—or, to us, 13,000 B.C.—a time which may seem inconceivable but which more or less parallels Plato's date. We forget the magnificent cave paintings at Altamira and Dordogne dating from 12,000 to 15,000 B.C., paintings in color, requiring both skill and knowledge of compounding pigments, that portray animals in a manner that should put modern abstract artists to shame.

What then of man in the western hemisphere? Did evidence exist on our island of Antillia pointing to an early existence such as we find on the other side of the globe? Do we have ways and means of detecting traits that rise to a higher level of skill and technical knowledge here as early as 11,000 years ago that could compare with those of the known ancient world?

The western hemisphere, and particularly North America, had long been held in derision by European scholars for failure to produce any evidence of early man. Even as late as the 1930's, we were taught that man arrived by way of the frozen tundras of Bering Strait, trekking along on foot, roughly at the turn of the Christian era. It was still a common belief that the Indians had been in America only a few centuries before Columbus and that their mounds dated from about 800 A.D. to 1600 A.D. After long and protracted quibbling entry was conceded to these wanderers as early as 1000 B.C. But in 1950, no professional group could have suffered greater shock than archaeologists in the United States when Nobel Laureate Dr. Willard Libby's newly invented carbon-14 tests started disclosing dates reaching back to 5000 B.C., then to 10,000, then 20,000 and now as early as 50,000 years. Carbon-14 dating played havoc with those tenaciously held *ipse dixit* theories that had granted man no more than 3000 years in North America. It immediately became apparent that our teaching would need considerable revision to cope with this newly discovered by-product of nuclear physics. While carbon-14 dating could carry dates back just so far, we now have obsidian hydration dating, thermoluminescence and others that bring dating back approximately 100,000 years.

Many fascinating disclosures came to light as we appreciated for the first time secrets of man dating back countless millenia ago. At Fort Rock Cave in central Oregon, scientists recovered nearly 100 pair of intricately woven sandals fashioned of sagebrush that had been buried by volcanic ash which, when tested by this then new carbon-14 process revealed a date of 9000 years of age; bones of mammoths killed in Arizona by early hunters dated back 12,000 years; charcoal from hearths at Tule Springs, Nevada, tested to more than 23,000 years and one beautifully worked flint spearhead found in association with charcoal recovered during excavations for a Trinity River dam at Lewisville, Texas, was dated earlier than 37,000 years as the charcoal showed so little radioactivity that it fell in a range beyond the measure of then existing equipment. We now have the presently controversial excavations at the Calico site in California dating earlier than 50,000 years. Man appears to have been here a long time.

In this wearisome groping for answers, the most significant and reliable artifact, insofar as archaeologists are concerned, and on which they base their opinions, is the projectile point—familiarly known in the days of my childhood as an Indian arrowhead. These projectile points, or spearpoints, have formed the major area of archaeological study for purposes of identification and fall into a dozen or more classifications—Sandia, Clovis, Folsom, Dalton, Quad and Cumberland. Skeleton remains found in association with any one of these specific types, normally places it into a certain time period—before or after Folsom.

While each type of projectile point bespeaks of a distinctive period of time or of a certain region, the sophisticated Folsom point exhibits a technique that would have required years of experimentation to perfect. This unique point was first discovered near Folsom, New Mexico, in 1927, by scientists then excavating an extinct bison found embedded in clay and these points lay admist the bones. From this association, they reasoned that man and this extinct bison would have been contemporaneous and from its geological strata assigned a date of 10,000 years to the site. These Folsom points are distinguished by a smooth channel extending about three-quarters of the way up along both faces and marked by fine chipping along the edges, exhibiting an astonishing dexterity in craftsmanship and technique—one of the most skillfully fashioned of points known.

Archaeologists long assumed that only the arid southwestern region of the United States produced these beautifully designed and executed Folsom points. However, later discovery disclosed that the right hand was not aware of what the left was doing for in our southeastern region, on our island of Antillia, similar points with equal sophistication had long been known but under another name. These were the Cumberland points found throughout the Appalachian range, concentrated in areas around Tennessee, Alabama and Georgia. While this region had largely been ignored earlier by archaeologists, believing that since man trekked down from Bering Strait, he would have wandered southeast at a relatively later date and this territory thus suffered from equal study. Since some of these spear points more nearly approximate the earlier Clovis point, which extends back roughly to 12,000 years, greater attention has recently been directed to this lesser researched territory. Excavated sites now commonly give carbon-14 dates reading from 7000 to 9000 years—and since these points appear to have a closer affinity to the Clovis point, the southeastern region of the United States can claim for itself greater antiquity than had been earlier conceded.

Returning now to Plato, we find only brief description of this earliest period dating back to 9000 years before his time. One of the first elements on which we might well ponder relates to spears for at the outset he notes (Tim:24B): "A further feature is the character of their equipment with shields and spears; for we were the first people to adopt these weapons, it being the Goddess who instructed us; even as she instructed you first of all the dwellers in yonder lands." Here Plato tells us that the character of the spears which Greeks were first to make known in yonder land apparently had some unusual significance. Thus from 9000 years before his time Plato places Greeks in yonder land which later he identified as Atlantis. Were these unusual spears which they were the first to use Cumberland or Folsom?

In *Critias,* we are told that Poseidon took for his allotment the island of Atlantis and settled in a region of that island having the following description: "Bordering on the sea and extending through the center of the whole island there was a plain which is said to have been the first of all plains and highly fertile." Thereon dwelt one of the original natives on a hill, Evenor and his wife Leucippe together with their daughter Cleito. If we take Plato literally believing that what he said, he meant, and applying that which we related to the island of Antillia, then, extending through the center of that island bordering on the sea, we must first find a fertile plain. And we do. That plain would extend from the sea, or the Gulf Coast, north through the states of Georgia and Alabama for some 250 to 300 miles up to the Cumberlands and the Appalachian range—land which, today, is still fertile. Evenor lived here on a hill which presupposes a cave—for as yet formal houses were not known. Caves used as human habitation abound throughout this entire region. Scores exist in northern Georgia, Alabama and Tennessee in the foothills of the mountains.

Plate V—Russell Cave National Park   Photo-National Park Service

It would be difficult if not impossible to pin-point one specific cave isolating it from the others and say: this was Evenor's home. What we can do however is to segregate one specific cave from a score of others to determine whether or not that cave can furnish adequate evidence of ancient human habitation such as would have provided a home for Evenor and his family.

Such a cave exists and exists in the very center of our island at the adjoining boundary of Alabama, Georgia and Tennessee. Russell Cave, now a National Park, first was discovered in 1953 as a possible home of prehistoric man by Paul Brown of Chattanooga, an amateur archaeologist sensitive to evidence of man's early presence in the area. He, together with members of the Tennessee Archaeological Society, dedicated amateurs but all expert in the prehistory of the region, dug intermittently for two years finding traces of man that appeared to them highly unusual. Realizing the tremendous importance of their find, this amateur group placed the matter before the Smithsonian Institution who, in turn, sent archaeologists to survey the cave and, in 1957, started excavation of the floor. By the time the four foot level had been reached, a ton or more of artifacts came to light—bone needles, fishhooks, awls, a lamp and ornamental mussel shells.

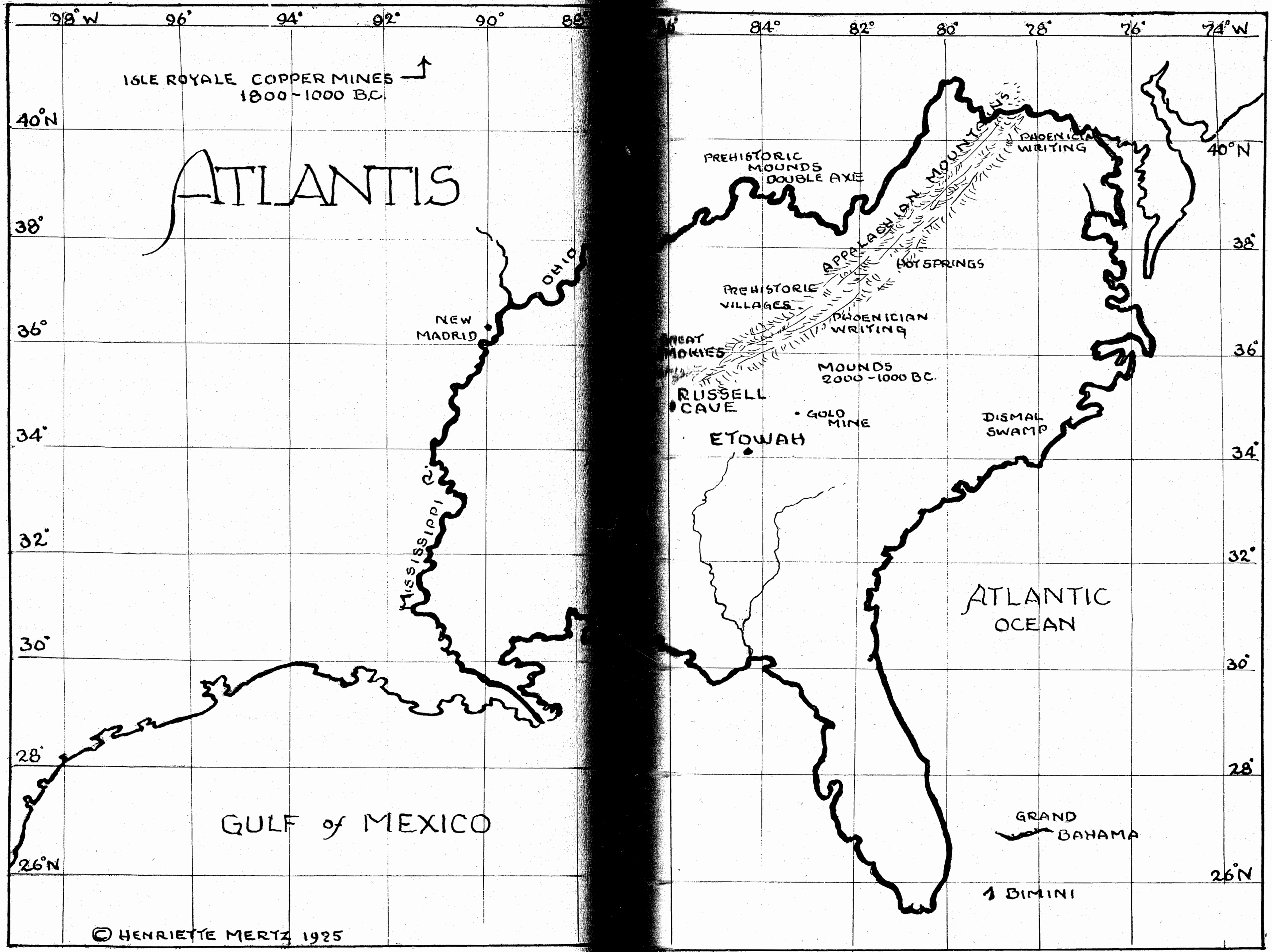
One of the more unaccountable situations turned up about the six foot level when the nature of the soil changed abruptly to a wet, sticky, orange-colored clay that clung to shoes and tools requiring the men to knead the clay like dough to dislodge artifacts embedded within it—artifacts unlike anything before discovered in southeastern United States.

This wet, sticky, orange-colored clay at a six foot level, testing roughly to 3000 years—or about 1000 B.C.—should give one considerable pause. Beneath this sticky clay, man-made artifacts were uncovered down to a 23 foot level

dating back to 9000 years. This sticky clay irritated the archaeologists hampering their work—but other than having difficulty removing it from their shoes, they gave no further thought to it nor did they attempt to understand how it might have gotten there. Why was no question raised? How could a layer of wet sticky clay possibly have been deposited inside that great limestone cavern? The mouth of this huge cave opened wide to 107 feet with an interior height of 27 feet, placed on a hillside overlooking the Tennessee Valley. No human agency brought that wet orange-colored clay inside that cavern laying down a covering burying some 6000 years of earlier human remains. Water must have stood inside this cave for countless ages since no sun could penetrate into the interior to dry it—it remained sticky and wet and six feet below the floor.

It required unending patience to knead the clay in order to dislodge the artifacts and what was found in and under this sticky mess? Said Carl F. Miller, the archaeologist reporting: "It was in this clay that we began finding human artifacts unlike anything ever before discovered in the southeastern United States. One was a new type of fish-hook, unlike those carved by later Woodland peoples from single bones, such as the single bone of a deer. These older hooks from the Late Archaic consist of two pieces of either bone or wood. They are made to be lashed together by animal sinew or plant fibers into a hinged V. Once the hook was in a fish's mouth, any pull would force it to open wider and thus plant itself more firmly. This ingenious device resembles more than anything else, fish-hooks used by much more northern early Indian people and later by Eskimos. We found no other implements that bear this strange kinship to more northern cultures."

Perhaps the most provocative artifact that came from these stratified layers within Russell Cave, and equal in significance was a bone lamp—a torch—so typically Greek.



Map of Atlantis

This torch from the upper fore leg bone of a large bear had been cut cleanly, spongy inner matter scraped out and bear fat stuffed into the closed lower end of the tube with probably some sort of wick which when lit would provide a flickering light. From time immemorial, Greeks used this type of flared torch—commemorated today when runners carry the flame from Greece to light the Olympic games—runner and torch stand as a symbol. Homer (Ody.VII: 95-105) speaks of these torches in the great palace of Alcinous when Odysseus marvelling at the opulence of the Phaecians, stood enthralled at the door. Here Homer tells us: "Within, seats were fixed along the walls . . . On these the leaders of the Phaecians were wont to sit drinking and eating for they had unfailing store. And golden youths stood on well-built pedestals holding lighted torches in their hands to give light by night to the banqueters in the hall."

After excavating down to 23 feet beneath the floor of the cave and recovering some two and one half tons of artifacts, with organic matter tested by carbon-14 to a date of 9000 years, the archaeologists further stated: "We suspect these wandering hunters roamed the region around Russell Cave 10,000 years and more. . . . Folsom Man left similar relics of his passing within a few miles of Russell Cave in both Alabama and Tennessee."

Plato placed Evenor in the center of the island of Atlantis where we have found him at Russell Cave. Plato also noted that in this early time other areas of the island were inhabited as he states in Timeaus: "Now on this island of Atlantis, there existed a confederation of kings, of great and marvellous power, which held sway over all the island . . ." And again, in Critias: "And (Poseidon) begat five pairs of twin sons and reared them up; and when he had divided all the island of Atlantis into ten portions, he assigned to the first-born of the eldest sons his mother's

dwelling and the allotment surrounding it, which was the largest and best; and him he appointed to be king over the rest, and the others to be rulers, granting to each the rule over many men and a large tract of country." The island of Atlantis thus was divided into ten tracts with the eldest of the twin sons occupying the center—dwelling of his mother Cleito, daughter of Evenor. To confirm in a measure the fact that other areas of the island likewise produce evidence of very early habitation, we call attention to a recent excavation in the northern sector of our island, some 30 miles southwest of Pittsburgh.

During the summers of 1973 and 1974, Dr. James Adovisio, assistant professor of anthropology at the University of Pittsburgh, together with a group of his students, excavated a large rockshelter near the small town of Avella that yielded artifacts and other evidence of human habitation dating back to 13,000 B.C., according to carbon-14 tests run by Smithsonian Institution. The first summer's dig produced a woven bark basket dating roughly to 2000 B.C., probably the earliest perishable artifact found in eastern United States, but during the 1974 excavation the group recovered over 100,000 bits and pieces of human and animal bones. The most exciting finds include some ninety firepits found at different levels, the oldest being one found at a depth of 2.95 meters dating to 13,000 B.C. and a second 5 centimeters above it dating to 12,000 B.C.

Another recent excavation at LaGrange Bluff Shelter, Calbert County, Alabama, conducted by the University of Alabama, produced both projectile points and charcoal flakes which gave a most unexpected early date of 11,000 years ago. Archaeological work is continuing at this site and in due course may well provide additional information concerning the early peoples who inhabited this region about whose very existence we formerly knew nothing. The Alabama date of 11,000 years ago, or 9000 B.C., once more assures us that Plato's early date has been amply confirmed by archaeological findings.

While the date of 9000 B.C., was not found to be anachronistic, we do have an instance that does appear to be an anchronism. At the beginning of this chapter, we quoted a passage from Critias (115E): "... and their shipyards were filled with triremes and all the tackling that belongs to triremes..." Plato again notes the word "trireme" in a later passage. If any word in the whole of Plato's Dialogues is anachronistic it is the word triremes. What obviously had been intended was the word "large" or "great" ships but not a trireme. It may be that this word is an error of some reteller of the story, some copyist, or it may have been a voluntary contribution by Plato himself. As the story comes to us, we are told that Egyptian priests first related the tale to Solon and, in time, it descended to Critias. Solon lived from about 638 to 559 B.C. The first recorded use of three-banked triremes occurred at the Battle of Artimisium in July, 480 B.C., and again later at the Battle of Salamis in September 480 B.C. The trireme was designed sometime between 550 and 524 B.C. to supplant the two-banked pentecontor in order to provide a shorter keel, greater maneuverability and increased power. Triremes had not yet come into existence at the time Solon lived and the word therefore could not have been transmitted either to Solon or by Solon and is an anachronism. Great ships having both oar and sail such as those comprising the fleet of Queen Hatshepsut, were well known in Mediterranean waters as early as 1550 B.C., and it may be assumed that what was intended by Plato's use of the word trireme referred to a large ship rather than to a specific design.

If Russell Cave and other areas in the vicinity produce evidence of the presence of man as early as 13,000 B.C., as indicated above, as well as the countless number of Folsom

points, then it would appear that if this region is in fact Atlantis and Evenor was Folsom Man, then Plato's date of 9000 years before his time is no anachronism, no exaggeration nor multiplied by a factor of ten as we have been led to believe. As one archaeologist observed, wandering hunters roamed around Russell Cave 10,000 years and more, and Folsom Man left similar relics in Alabama and Tennessee. Why then was Evenor and Folsom Man not one and the same as Plato and the archaeologist dated? They inhabited the same region in the same ancient day.

This was the period of time Plato described when man had no ships. A long period intervened between this time when man was unlettered and roamed the forests and mountains leaving little record behind him and the time when man sailed the seas and great ships filled the harbors.

Plato then goes on to describe an opulent society living here with palaces and temples, gardens and flowers, and all the amenities of a rich life. We therefore shall examine the possibility as to whether or not such an affluent society existed on the island and in the area around Russell Cave at the later time when great ships sailed the seas—the Mycenaean period roughly between 1700 B.C. and 1000 B.C.

THE LATER TIME

CHAPTER VII

There can be little doubt of the affluence of these people who lived at the later time on Atlantis for they had accumulated a vast wealth and lived a life of luxury and ease. Plato pondered long over an extensive catalogue of features found on this beautiful isle for he recounts at some length the magnificence of their palace which he placed near the center of the island and which we place generally in the Appalachian chain—Atlanta, Chattanooga, Knoxville—the approximate center from east to west and from north to south. The palace so we are told, was inlaid with pearls and precious metals; a paved roadway led to the walled citadel which itself was located on an island having connected channels between the rivers tunneled under and bridged over with towers and bastions providing access for great ships to the palace; trees bearing apples, pears, pomegranates, olives and figs; timber; animals both wild and tame, including elephants; flowers, herbs; copper and gold; horses and racetracks, arenas for sports—nothing was wanting for pleasure and enjoyment.

This time period which Plato noted when large ships sailed the seas, would fall roughly between 2000 and 1000 B.C. His description calls to mind Homer's account in the *Odyssey* which we noted in an earlier work, as well as the lengthy account of Diodorus Siculus of a fabulous island in the western Atlantic.

Homer described the palace of Alcinous where Odysseus, after leaving Calypso, found himself washed ashore in a strange country and, standing before a great palace, marvelled at its spendor. Homer tells us (Ody.VII) that walls of bronze with a molding of blue enamel extended from the threshold to the innermost parts of the palace. Golden doors hung on silver posts set in bronze with a silver lintel. Inside tall chairs were fixed along the walls with wonderfully woven soft robes thrown over them. Here the Phaecians enjoyed their food and wine. Outside the palace was a four-acre orchard. Tall trees were thriving, heavy with pears and pomegranates, with apples, sweet figs and luscious olives. Cluster upon cluster of grapes filled the vineyards. Two springs well up, one of which runs through the garden while the other flows under the courtyard gate and on to the palace itself. Here Odysseus stood speechless and marvelled at the splendors and the wealth surrounding the palace of Alcinous. Homer's description of this far land of Scheria had been written many centuries before Plato and related a tale which took place some ten years after the Trojan War, about 1250 B.C. while Plato's account came from the Egyptian priests. Both stories appear to describe the same geographical area.

A more extensive record comes from Diodorus Siculus writing about 56 B.C., describing this island as the Carthagenians knew it. In his Book V:19-20, he told of events of history taking place at an earlier date: "But now that we have discussed what related to the islands which lie within the Pillars of Hercules, we shall give an account of those which are in the ocean. For there lies out in the deep off Libya an island of considerable size, and situated as it is in the ocean it is distant from Libya a voyage of a number of days to the west. Its land is fruitful, much of it being mountainous and not a little of it being level plain of surpassing beauty. Through it flow navigable rivers which are used for irrigation, and the island contains many parks with trees of every variety and gardens in great multitude which are traversed by streams of sweet water; on it also are private villas of costly construction, and throughout the gardens banqueting houses have been constructed in a setting of flowers, and in them the inhabitants pass their time during the summer season, since the land supplies in abundance everything which contributes to enjoyment and luxury. The mountainous part of the island is covered with dense thickets of great extent and with fruit trees of every variety, and inviting man to life among the mountains, it has cozy glens and springs in great number. In a word, this island is well supplied with springs of sweet water which not only make the use of it enjoyable for those who pass their life there but also contribute to the health and vigor of their bodies. There is also excellent hunting of every manner of beast and wild animal, and the inhabitants being well supplied with this game at their feasts, lack of nothing which pertains to luxury and extravagance; for in fact the sea which washes the shore of the island contains a multitude of fish, since the character of the ocean is such that it abounds throughout its extent with fish of every variety. And speaking generally, the climate of this island is so altogether mild that it produces in abundance the fruits of the trees and the other seasonal fruits for the larger part of the year so that it would appear that the island, because of its exceptional felicity, were a dwelling-place of a race of gods and not men.

"In ancient times this island remained undiscovered because of its distance from the entire inhabited world, but it was discovered at a later period for the following reasons. The Phoenicians, who from ancient times on made voyages continually for purposes of trade, planted many colonies throughout Libya and not a few as well in the western parts of Europe. And since their ventures turned out

according to their expectations, they amassed great wealth and essayed to voyage beyond the Pillars of Hercules into the sea which men call the ocean. And, first of all upon the Strait itself by the Pillars, they founded a city on the shores of Europe, and since the land formed a peninsula, they called the city Gaderia. The Phoenicians then while exploring outside the Pillars for the reasons we have stated and while sailing along the shore of Libya, were driven by strong winds a great distance out into the ocean. And after being storm-tossed for many days they were carried ashore on the island we mentioned above, and when they had observed its felicity and nature they caused it to be known to all men. Consequently the Tyrrhenians, at the time when they were masters of the sea, purposed to dispatch a colony to it; but the Carthagenians prevented their doing so, partly out of concern lest many inhabitants of Carthage should remove there because of the excellence of the island and partly to have ready in it a place in which to seek refuge against an incalculable turn of fortune in case some total disaster should overtake Carthage. For it was their thought that, since they were masters of the sea, they would thus be able to move, households and all, to an island which was unknown to their conquerors."

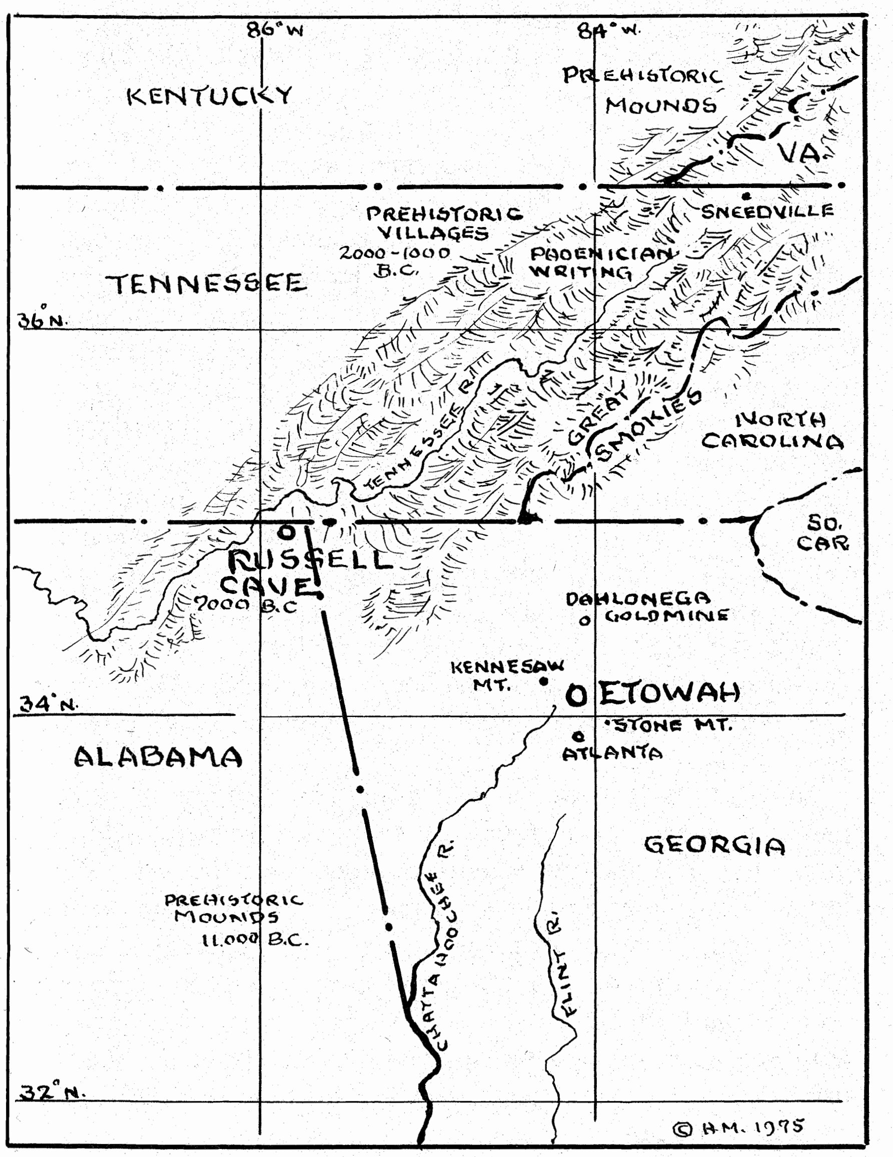
Diodorus gives a clear picture of the general atmosphere as it was known in Carthage and tells of the same surpassing beauty of a far-away island in the ocean in much the same terms as both Homer and Plato yet he does not appear to have taken his information from them. If Homer's island of Scheria and the Atlantis of Plato together with that distant island described by Diodorus are one and the same as the island of Antillia which De Soto described in an identical manner, did all these features, which Diodorus called a dwelling place for the gods, exist in the region DeSoto encircled?

Here stand the Great Smokies, the Shenandoah Valley and the Blue Ridge each of surpassing beauty in its own right. In the springtime, mile after mile of this Appalachian countryside lies under a carpet of wild rhododendron and scarlet azalea, redbud and dogwood, sweet-smelling cedar with tansy and other aromatic herbs scenting the air—apple blossoms like snowflakes cover the Shenandoah while peach blossoms scatter their petals throughout Georgia. In the fall, these low mountains turn into a kaleidoscope of yellows, oranges and flaming reds as trees gradually change color—an unforgettable sight in which ancient peoples likewise delighted.

Homer appears to be the only poet who told us of the day to day life of the people—leaders in their council chambers; games and songs; we learn of episodes from the Trojan War through the songs of the blind bard Demodocus who sang of the quarrel between Odysseus and Achilles to the secret delight of Agamemnon; of skillful young dancing maidens with flashing feet; we learn how the women weave and where they wash their clothes. Homer speaks of their ships and the fifty strong young rowers—indicating a pentacontor. All this and more which only a rich well-organized society would provide. This was Scheria and Atlantis.

In addition to these luxuriant amenities of life, Plato also noted such diverse and unrelated items on the island as gold mining, elephants, horse-track racing and hot and cold springs. Of gold mining we are told (Cri:114D): "Metals to begin with, both the hard kind and the fusible kind, which are extracted by mining, and also that kind which is now known only by name but was more than a name then, there being mines of it in many places on the island—I mean 'orichalcum,' which was the most precious of the metals then known except gold."

Fifty miles north of Atlanta, where stands the present town of Dahlonega, back in 1825, a gold mine sparked a



Detail map—Etowah—Russell Cave

sensational "rush." In 1802, when this mine first came to attention of early settlers pushing westward following the Revolutionary War at the turn of the nineteenth century, this mine disclosed a far more ancient working. Indians then living in the area disclaimed knowledge and further had no tradition within their tribe that told of this gold mine. Indians, themselves, are not known to have mined. When more colonists moved into Georgia, this gold mine at Dahlonega started producing to such an extent that persons from far distant places on foot or horseback fired by excitement or hopes of increased wealth, flocked to this small outpost. That gold mines existed on the island of Antillia corroborates Plato. Copper mining existed and still exists in Tennessee where large deposits are found. However, as we noted above, one of the truly great deposits of the world, the only one producing pure copper in quantity, while not on the island itself—yet "on the continent beyond"—following the Trap Range on the Upper Michigan Peninsula and on Isle Royale, 500,000 tons of this pure copper were mined out between 1800 B.C. and 1000 B.C.

In addition to copper and gold, Plato spoke of orichalcum, a metal more precious than any except gold. No metal has ever baffled scientists more than this one. Metallurgists long have sought an answer to this strange element "orichalcum" but, to date, no one knows what it is—nor is it to be confused with tempered copper which supposedly was thought to be a lost art. Tests have been conducted on combinations of substances that might possibly lead to orichalcum but these tests revealed nothing that led to any such solution.

Ancient Egyptians as well as Greeks, were past masters in the art of deceptive fabrication. Scientific treatises carry extensive translations of these ancient metallurgical practices. It was legal to gild copper by means of quicksilver,

the copper first being subjected to fire then quenched with brine, vinegar or alum and after polishing with a mixture of pumice and alum, the gold leaf was laid on with mercury. Some forty or fifty unconventional combinations of metals and other substances known anciently—knowledge of which long since has passed from existence—might, if experimented with lead to a solution of orichalcum. Even today, with all of our metallurgical expertise, orichalcum continues to baffle chemical and metallurgical engineers.

Another matter continually brushed aside is that of elephants. Plato places elephants on the island of Atlantis. Diodorus Siculus (XIX.54.3) tells of elephants being transported from Megara to Epidorus in 315 B.C.; Livy (XXI.28) noted a raft-like ship transported elephants across the Rhone; Hannibal took them across the Alps. Constantin F.C. Volney, the French naturalist, in 1796, recorded a great quantity of elephant bones some 36 miles from the mouth of the Kentucky river—at Big Bone, Kentucky. Volney concluded that they had been brought to this spot by force of waters. Normal flooding of a river would hardly be a likely answer to moving these massive pachyderms said Volney. Tremendous force would have been required. What extensive study has been published regarding these bones? None. All remains of elephants uncovered here immediately are classified "ice age mastodons" and the subject dropped. Some time early in the 1960's workmen constructing a sewer at South Bend, Indiana, turned up elephant bones which were sent to one of the universities for study. Letters of inquiry to the university remain unanswered. Pipes and other artifacts in the shape of elephants excavated from mounds periodically turn up. Massive mounds in the shape of elephants once existed in the State of Wisconsin. One particular effigy mound, of which much has already been written, is located in Bloomington Township, Wisconsin, just above the overflow of the Mississippi. An

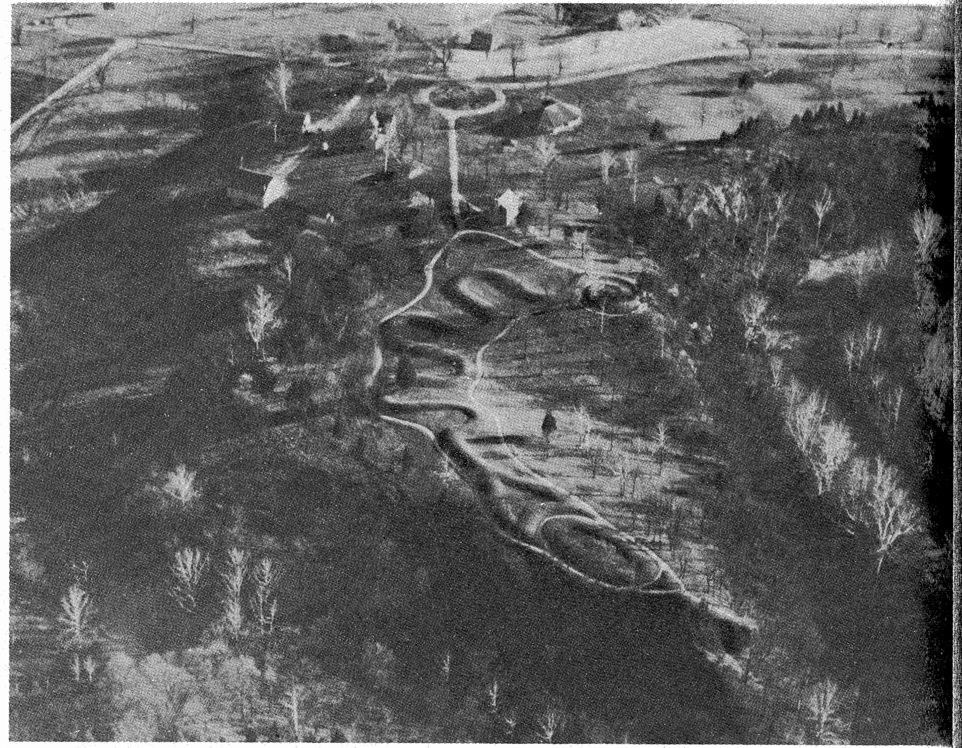


Plate VI—Great Serpent Mound, Ohio Photo-Smithsonian Institution

early Smithsonian (1890) report noted that although this mound had been under cultivation for five years, yet outline of the elephant remained distinct. The body from head to tail measured 135 feet while width of the body varied from 55 to 60 feet, reduced by cultivation to a height of from 3 to 6 feet with a proboscis measured from back of the head to nozzle 60 feet. One cannot fashion such a highly distinctive feature as an elephant's proboscis without first having seen an elephant. Elephant bones have been found in various places throughout our island—unexplained.

Plato tells us of springs: "And Poseidon himself set in order with ease, as a god would, the central island, bringing up from the earth two springs of waters, the one flowing warm from its source, the other cold." And again: "The springs they made use of, one kind being cold, another warm water, were of abundant volume, and each kind was wonderfully well adapted for use because of the natural taste and excellence of its waters." Homer told us of two springs at the palace of Alcinous. Volney, the French naturalist, in his reconnoitering through the Appalachians, told us: "Going from Staunton to Green-brier among the latter are found those hot springs famous in Virginia for their sanative qualities and distinguished by the name of Warm Springs, whose temperature is mild; Hot Springs, whose temperature is higher; and Red Springs. Warm Springs is of ammoniacal sulphurous nature whose heat is 20 degrees Reamur." White Sulphur Springs, a world famous spa, nestles in the Alleghenies beside Sweet Springs. Springs abound in the region—hot, cold, sulphurous and sweet.

The Fidalgo of Elvas writing of this lush country-side, noted that: "Fruit is abundant and good and from Cutifachique to this place are walnut and plum, persimmons growing about over the country without planting or pruning and the size and luxuriance they would have even were they cultivated in orchards." Surpassingly beautiful as well as delightful, this Appalachian region abounds with fertile fields and orchards producing apples, pears, peaches, grapes, persimmons, plums, pomegranates, peanuts, walnuts and pecans.

We recall the bountiful banquet Homer described and we picture in our mind the probable menu, foods readily available to them—fresh perch, trout, and bass which filled the rivers and small lakes, roast venison as well as wild turkey, grouse and pheasant, roast duck as the migrating season permitted, squash, beans and corn, olives, figs, grapes, plums, walnuts and delicious sweet wines. What more could one have asked? To Plato, to Homer and to Diodorus Siculus, this plenteous land seemed a dream beyond comprehension—a dwelling place of the gods. And so it was.

THE THOMAS REPORT

CHAPTER VIII

In the two preceding chapters, we first identified Evenor as Folsom Man who lived in a period stretching back to 9000 years before Plato's time and then brought the later people up to the time when large ships sailed the seas, roughly between 2000 to 1000 B.C., locating both the earlier and later peoples in a restricted area central to the island of Atlantis where Plato had placed them. In the following chapters we shall examine those same features insofar as they relate to the island of Antillia and this chapter will consider the general area from Atlanta to Russell Cave based largely on the report of Cyrus Thomas (12th Annual Report, B.A.E., Smithsonian, 1890). The following chapter will extend the locale north to the Clinch River looking into the excavations of Major William Webb (Smithsonian Bulletin No. 118, An Archaeological Survey of the Norris Basin in Eastern Tennessee, 1938) and following that, a chapter on Poseidon's "Holy Isle" an island within the larger island as noted in various nineteenth century accounts of Etowah, the impressive mound immediately north of Atlanta, vividly described by such early travelers as Jones, Whittelsey, Willoughby, Moorehead, Thomas and others.

Many pages of history remain blank—periods of time seemingly lost forever. Our own history is no exception. We are ignorant of events that must have occurred a thousand years and more before the coming of the Spaniards at the end of the fifteenth century A.D. Who built Etowah? Who constructed the vast mound building operation that took place in the southeastern part of the United States—mounds obviously constructed by a highly sophisticated people? We smugly shrug off the question by simply calling these ancient barrows "Indian Mounds" believing that ends the matter. But does it?

In the period of expansion following the Revolutionary War when settlers shoved westward over the Alleghenies, starting around 1800, aggressive newcomers unrelentingly wiped out the Indian and anything pertaining to the Indian. In this prevailing spirit of the day, thousands of mounds that might have provided invaluable evidence of the ancient race of people that once existed here, were ruthlessly plundered.

One of the first major systematic explorations despoiling these mounds was that undertaken by Cyrus Thomas on behalf of Smithsonian Institution. Thomas gutted over 2000 mounds sending cold chills down one's spine for after first prodding the mound with an iron rod, he shovelled out the broken pieces of ceramics and other burial goods not looking for anything in particular but merely examining the mound to see what it might afford—a tragic loss history can never recapture.

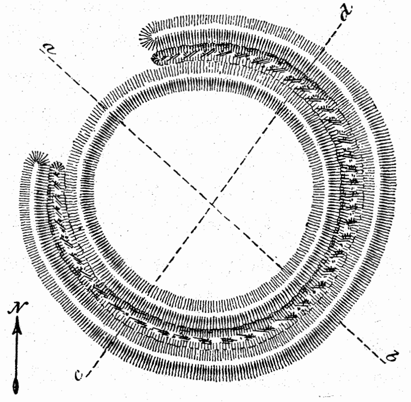
In the Administrative Report accompanying the Thomas Report, Director of the Bureau of American Ethnology stated in no uncertain terms that the mounds of Tennessee were constructed by ancestors of Cherokee, those in Georgia by Yuchi and others in Mississippi by Choctaw, all of which were built in the 15th and 16th centuries A.D., leaving no room for doubt. No reason was offered as to why this work came to a sudden halt after 1492, although descendants of these same tribes still lived in the territory but did not continue to build. The official policy thus

established by Smithsonian in 1890 with reference to the builders of these mounds, still prevails today.

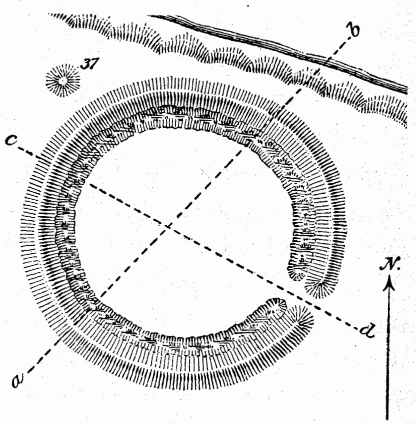
One of the interesting sidelights of the Thomas report is his close attention to the expedition of DeSoto and he quotes repeatedly not alone Ranjel and the Fidalgo of Elvas, but also from the account as given by Garcilasso de la Vega. As we noted earlier, DeSoto ravished the entire countryside committing inexcusable acts of horror and while Thomas committed no murder as did DeSoto, yet he did commit an assault on history which is equally reprehensible.

In spite of the almost total destruction of these ancient mounds by the Thomas expedition, his report furnishes the most comprehensive account that we have covering the southeastern region of the United States at this early period and centering within the prescribed area in which we have interest. Much of the detail in reporting unusual construction that Thomas found bears strong affinity to that which Plato described and it is that to which we call attention.

One word that continues to disturb anyone attempting to ferret out the meaning of Plato's descriptive material is his repeated use of the word "sea"—bridges over the sea; they roofed over the sea-way; a wall which began at the sea and ran around in a circle; they bridged over the circles of the sea which surrounded the ancient metropolis making thereby a road towards and from the royal palace. Throughout his story, Plato used the word "sea" in the sense of being part of the sea—that navigable body of water which we today identify as a river flowing into the sea. This was the interior river system noted in an earlier chapter in bounding the island of Antillia. For the present, we will therefore interpret Plato's word "sea" to mean river and in a later chapter we may find that his use of the term may have been correct as our present river system was known anciently.



Circular enclosure



Circular enclosure

In *Critias,* we find this passage: “Now the island and the circles and the bridge, which was a plethrum in width, they encompassed round about, on this side and on that, with a wall of stone; and upon the bridges on each side, over against the passages for the sea, they erected towers and gates. And the stone they quarried beneath the central island all round . . .”

What did Thomas find? In writing of inclosures, Thomas observed: “The wall was accompanied by an interior ditch and had an entrance way, opposite which, and about 6 feet from it, on the inside were the remains of a wall so placed as to form a rear guard. . . . It is not unusual to find along these walls slight elevations or projections, supposed by some to have been the foundations for towers or some such works for observation or defense. The inclosure near Sanderville furnished an example of this kind; also that in Wilson County, which is a circular earthwork having an interior ditch.” The most remarkable example of this kind of works, however, are found in Hardin County, in the neighborhood of Savannah. “On the east side of the Tennessee river, on the high ground adjoining the town, are extensive earthworks inclosing a group of mounds. The embankment is five-sided, the ends terminating on the high bluff of the river. At intervals of 80 yards along this wall are remains of bastions which extend about 20 yards to the front along the main line and 30 yards at the main angles. About 55 yards in advance of this line and parallel to it, is a similar but less elevated embankment, now partly obliterated but still traceable. The bastions of this latter line project 40 feet in front and alternate with those of the main line.” Thomas reports towers and entrance-ways—towers and gates of Plato—with bastions along the wall which terminated on the high bluff at the river—or as Plato wrote—the walls of stone extended over against the passage for the sea.

Even more incredible than these towers and bastions, Thomas reports on the covered ways which Plato referred to as “roofed-over sea-ways,” Thomas stated: “Covered ways or passages protected by embankments leading down to an adjacent stream or spring, are found in some of the inclosures of Tennessee, and open gateways through the walls, as well as raised passageways over them, afford means of entrance.” What could corroborate Plato more precisely? Thomas frequently referred to circles or circular enclosures with which Plato seemed preoccupied for Thomas reports similar bridges and circular ditches for we find him saying: “Near this is another work of similar construction but differing slightly from the usual type. The circular platform defined by the ditch is on a level with the top of the outside wall, and seems to have been raised above the natural surface of the ridge. A raised pathway on a level with the platform interrupts the ditch on the northwest side. In a hollow between the two last-mentioned works is a shallow ditch inclosing an area about 82 feet in diameter." In Plato's account, he employs the word "channel" while Thomas speaks of these channels as "ditches"—others refer to them as "moats." Plato repeatedly tells of these long channels bordered on either side by walls which Thomas reports: "In addition to the ditches which usually line the walls of inclosures, a few instances occur where the surrounding defense consisted of a ditch only. Canals of considerable extent which are considered prehistoric are found at several points. One of these is said to be 14 miles in length."

These two accounts stem from unrelated documents—one first told about 600 B.C., the other published in 1890 A.D., 2000 years and 8000 miles apart—that parallel each other in the most infinitesimal detail. Plato's note of covered bridges and passageways and his continued reference to circular patterns finds itself strangely duplicated time after time by circular inclosures, circular ditches, circular embankments and covered passageways throughout the Thomas report. Was any Indian tribe ever known to bridge over a river and erect towers and bastions at either end of a bridge? Did any Indian ever build such an unusual feature as a covered passageway roofing over an entrance? Plato and Thomas both so report—Plato that these features existed on the island of Atlantis and Thomas telling of his findings in Tennessee—where we place Antillia.

Since the time of Thomas Jefferson, it has been believed that these prehistoric mounds and other massive earthworks, originated with a more ancient and highly cultured people—not ancestors of the historic Cherokee occupying the land at the time of white settlement as Smithsonian

would have us believe. Major William Webb, in his analysis of early occupation in the Norris Basin, writes: "The lack of any historic record or any Cherokee tradition of any occupation of Norris Basin seems clearly to indicate that these sites had been occupied by people other than Cherokee at a time before the coming of the Cherokee on the Little Tennessee, and the sites on the Clinch and Powell rivers had been so long deserted that the Cherokee had no knowledge of this occupancy. In such cases the cultural connections of the builders must be sought elsewhere."

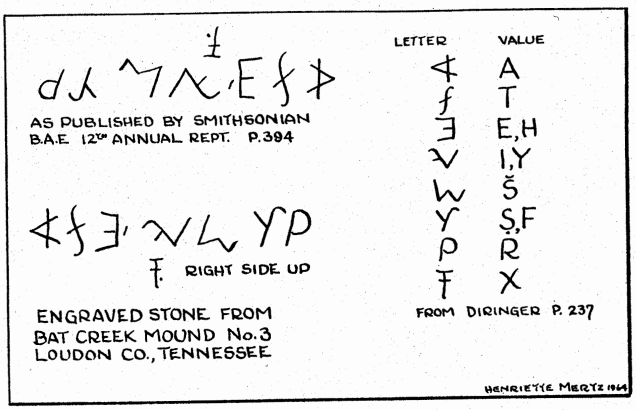
Major Webb, we might add, commented critically on the earlier Thomas archaeological survey by stating: "Alas, we may never know, since all of the mounds on Little Tennessee River were so 'thoroughly explored' that all information we now seek has been destroyed." And, further: "In this connection, it is interesting to examine Thomas' report on several of these mounds and to suggest a reinterpretation of his findings in the light of facts obtained from the Norris Basin."

Webb reviewed the early history of this region quoting freely from seventeenth and eighteenth century sources, not confining his study to the Norris Basin but covering the Appalachians and surrounding territory taking in some 40,000 square miles included in the states of Virginia, Tennessee, North and South Carolina, Georgia and Alabama, the country of the more ancient Muskhogeans, claimed primarily by the historic Cherokee. The Cherokee, however, were reportedly newcomers moving into this region as a hunting preserve only a few hundred years before the white man's coming. Webb, quoting Ramsey, who stated: "At the time of earliest exploration, the country north and east of the Tennessee river was not in the occupancy of any Indian tribe. Vestiges were then found, and, indeed, still remain, of an ancient and dense population—indicating higher progress in civilization and the arts than has been obtained by more modern tribes in this part of the continent." Early in 1776, William Bartram visited the Cherokee on the upper reaches of the Little Tennessee. He found a town-house situated on a mound 20 feet high in the midst of a village of about 100 houses and, after describing construction of buildings both inside and outside as well as that on top of the mound, Bartram observed: "The Cherokee themselves are as ignorant as we are, by what people or for what purpose these artificial hills were raised."

Of tradition, legend or folk-lore related by the Cherokee themselves of their own history, Webb reports nothing earlier than 1620 with only brief mention of DeSoto having been there since the exact date of their coming into this region in all probability would be considered comparatively recent. Other reports confirm the fact that the Cherokee were totally ignorant of a more ancient peoples living in their then territory disclaiming them as ancestors and knowing nothing of the artificial mounds merely that these mounds were there when their fathers came.

With reference to the present Cherokee who claim this region as their own, we should like to call attention to one specific mound in Cherokee territory excavated by Thomas since this mound is of importance to our story. Two miles below Morgantown on the west bank of the Little Tennessee river, Bat Creek joins with the main river at which spot two mounds were excavated, the smaller of which measured 28 feet in diameter and 5 feet high. The owner of the property stated that he had cut large sassafras trees which were standing on the mound some forty years before—about 1840—that the mound had been covered with a cluster of trees and grapevines as long as the oldest settler could recollect—going back more than twenty years to a time when Cherokee had been removed by the government to a reservation in Oklahoma. Thomas reported

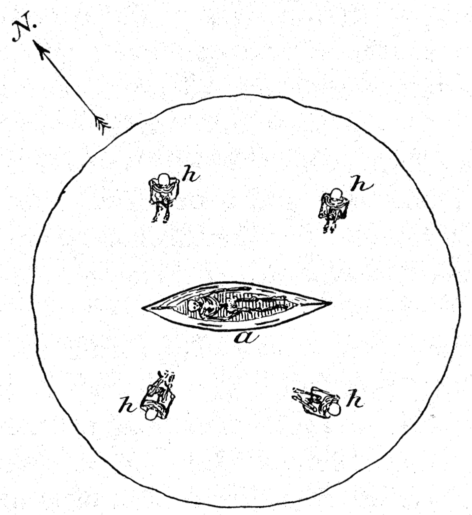
that nothing of interest was discovered in the mound until the bottom was reached where nine skeletons were found lying on the original surface of the wet ground, two of which were separate from the others. Thomas expressed no surprise that the earth around the skeletons was wet at ground level inside the mound but reported: "On the same level were seven others all lying close together side by side in a line with the heads north. All were badly decayed. No relics were found with any except No. 1, immediately under the skull and jaw bones of which were two copper bracelets, an engraved stone, a small drilled fossil, a copper bead, a bone implement and some small pieces of polished wood. The earth about the skeletons was wet and the pieces of wood soft and colored green by contact with the copper bracelets. The bracelets had been rolled in something probably bark, which crumbled away when they were taken out. The engraved stone lay partly under the back part of the skull and was struck by the steel rod used in probing. This stone is shown in Fig. 273. The engraved characters on it are beyond question letters of the Cherokee alphabet said to have been invented by George Guess (or Sequoyah) a half-breed Cherokee about 1821."



Phoenician inscription from Bat Creek, Tennessee

In publishing this stone as Fig. 273, Smithsonian unknowingly inverted the inscription. We were first to discover and publish this error in our book *The Wine Dark Sea* (1964), noting there that since the Phoenician characters had been published upside down, it would indicate two things—first, that in that period of time Smithsonian had knowledge of neither Cherokee nor Phoenician and second, since the inscription is in Phoenician characters, the period of time when it was placed there would have been ancient and in all probability when Phoenician letters were in common usage. The inscription has been translated as—"The whisper of death"—indicating, as one European scholar stated, that the person died a natural or quiet death, not a violent one. Since our publication, the matter has received world-wide attention.

Plato continually referred to islands and Thomas, time after time, noted mounds on islands in various rivers. On his predatory tour through Appalachia, Thomas excavated one mound on Vincent Island, Pigeon River, Tennessee, that measured 200 feet long. On Long Island in the Holston River above Knoxville, he dug up 19 skeletons. This mound and island is of interest as it stands in the immediate vicinity of the area where now live the Melungeons. As Thomas stated: "The body of the mound was composed of dark sandy soil similar to that of the surrounding surface of the island, with numerous small patches of yellow clay scattered through it without apparent order or arrangement." Here we run into yellow clay such as archaeologists spaded up at Russell Cave. Thomas continued: "In it were five skeletons near the original surface of the ground. In the center was a large boat-shaped vessel of clay, 9 feet long, 4 feet wide in the middle, but tapering to each end, and about 15 inches deep. The vessel, which was probably sun-dried, was water soaked to such an extent that it crumbled into minute



Clay burial boat, Tennessee

Plate VII—Egyptian solar boat Photo-Field Museum, Chicago

fragments when an attempt was made to remove it. It lay northwest and southeast and contained an adult skeleton lying at full length with the head northwest. In the vessel, near the head of the skeleton, was a stone image represented in Fig. 240. This, which represents a squatting figure is 14½ inches high and is of carved stone. At each of the points corresponding to the cardinal points (outside the boat-shaped vessel) was a sitting skeleton facing toward the center."

Scattered patches of yellow clay within the mound with a burial beneath and the clay of the boat still water soaked! Might this strange water soaked clay vessel not have resulted from a similar situation as that sticky, wet, orange-colored clay at Russell Cave at a level dated approximately 1200 B.C.? Inside this clay vessel a skeleton stretched full length while four others were in sitting positions at the four corners outside facing the skeleton in the boat—suggesting retainers who in ancient times frequently accompanied an important personage in death and were buried with him.

In his book *Archaic Egypt*, Emery notes that servants of the kings accompanied them in death—the boat itself was supposed to carry the spirit of the dead owner on his voyage with the sun-god. Fakhry, in his book *The Pyramids*, wrote extensively on these boat burials particularly of the excitement caused by the discovery of a wooden boat, in 1954, just south of the Great Pyramid at Giza. Fakhry further tells us that only three of these wooden boats had previously been known dating from the Twelfth Dynasty, two of which are exhibited in the Cairo Museum and the third in the Field Museum in Chicago. It was this very wooden boat in the Field Museum which furnished Dr. Willard Libby with his first carbon-14 date. He had requested a sample of ancient material of known age on which to make his test. A piece of the deck

planking from this 32 foot cedar boat gave him the approximate date of 3621 Years—about 1621 B.C.—which confirmed his theory and assured him of its potential accuracy and value to archaeology.

The carved stone image found within the wet, clay boat finds a unique affinity in its stylized form of its flat, upturned face, with carved marble figures from the island of Amorgos in the Cyclades, dating around 2000 B.C. A boat burial containing an important dignitary—a king—could well have been one of the kings who lived on an island of whom Plato wrote for this mound was situated on an island five miles long in the Holston river above Knoxville. Does it not seem strange that neither Thomas nor Smithsonian raised any inquiry into so anomalous a situation, in Cherokee territory, as a boat burial? Boat burials were common practice in ancient Egypt but surely not to Cherokee.

We are reluctant to leave the Thomas Report since it cries out for a more up-to-date and complete reinterpretation of artifacts and other material as well as the mounds themselves, as in 1890 when his report was completed, neither he nor Smithsonian had any slight conception of what it was that had been found or the historic importance of that which was destroyed. Thomas "investigated" over 2000 mounds and continually referred to their circular formation. On Lenoir Island on the banks of the Tennessee, stood two mounds, one of which he reports as very symmetrical, the base almost an exact circle 100 feet in diameter. In addition to mounds, Thomas sketched scores of what he termed "Sacred enclosures." These enclosures appear to be an arena-like formation—low circular walled embankments open in the center as would be a sports field, 1400 feet in circumference, the embankment could well accommodate seats for spectators. Again, attention might be called to Plato's preoccupation with circles—he told us that inhabitants of Atlantis had exercising grounds set apart for men and some for horses in circular belts on the island and that in the center was a racecourse laid out for horses with a strip which ran around the whole circumference reserved for equestrian contests. What better function had these circular walled embankments that Thomas carefully sketched than the circular exercise grounds and racecourses of which Plato wrote? In no other archaeological site have circular enclosures such as these with moats and ditches been recorded in the literature.

Circular enclosures, boat burials, a Phoenician inscription, bridges and towers including "roofed-over sea-ways"—recorded both by Thomas and Plato—not Cherokee.

MAN POWER

CHAPTER IX

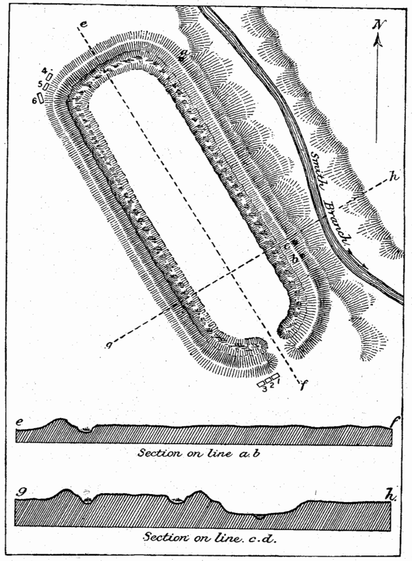
Another of the more controversial matters that provoked continued discussion was the number of men Plato placed on the island which, to many, appeared highly improbable.

At the outset, we are told: "As regards their man-power, it was ordained that each allotment should furnish one man as leader of all the men in the plain who were fit to bear arms; and the size of the allotment was about ten times ten stades and the total number of all the allotments was 60,000; and the number of men in the mountains and in the rest of the country was countless, according to the report, and according to their districts and villages they were all assigned to these allotments under their leaders. So it was ordained that each leader should provide for war the sixth part of a war-chariot's equipment, so as to make up 10,000 chariots in all, together with two horses and mounted men; also a pair of horses without a car, and attached thereto a combatant with a small shield and for charioteer the rider who springs from horse to horse; and two hoplites; and archers and slingers, two of each; light armed slingers and javelinmen, three of each; and four sailors toward the manning of twelve hundred ships. Such then were the military dispositions of the royal city; and those of the other nine varied in various ways which it would take a long time to tell."

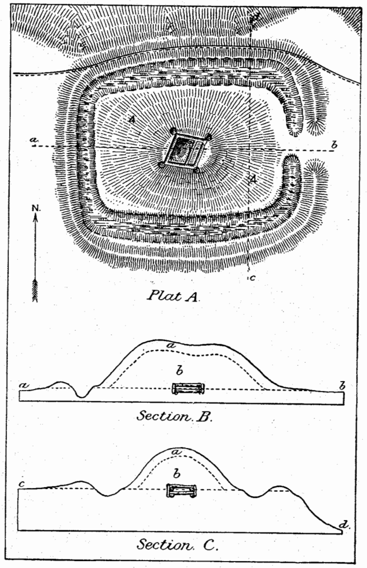
At this late date, difficulty is encountered in determining precisely the extent of population that existed at any given time on the island. Therefore, as perhaps evidence of the great number of persons living in this Appalachian region at a far distant date, some concept might be gained by looking first to various types of earthworks they left behind—the majority of which now no longer exist but the Thomas Report, noted in the previous chapter, gives some approximation.

At the request of the Mississippi Historical Society, Theodore H. Lewis, from 1878 to 1895, reporting on the DeSoto expedition as it wound its way through Mississippi, surveyed some 10,000 mounds. This region of survey in Mississippi falls within the western section of our island bordering on the Mississippi river. Lewis also surveyed 12,000 other mounds in the area, a region which is perhaps less known for its mounds than is that to the east in Alabama, Georgia, West Virginia, Tennessee and Kentucky—or in Ohio. Insofar as our island is concerned, this region would have been included by Plato as that part of the island that was of continental proportion—as large as Libya and Asia—since the Mississippi river forms the western boundary and the Ohio river forms the north boundary. In Tennessee, as Thomas excavated one mound after another, he reported finding 67 skeletons in one mound; 56 in another; 59; 90 and 76, giving some indication of numbers of persons buried within a single mound in one restricted area. In one county of Ohio alone over 3000 mounds once stood.

Of the cubic feet of earth removed, Thomas stated: "From these dimensions it is easy to calculate with approximate certainty the cubical contents of the mound, which we find to be about 4,300,000 cubic feet or 159,200 cubic yards. It therefore exceeds slightly in volume the entire wall of Fort Ancient in Ohio, and exceeds Col. Whittlesey's calculation by about 42,000 yards." This is one mound. How long it would have taken to carry basketfuls of earth to form that mound or how many men helped to construct it, at a time before mechanical aids such as belt conveyors existed, one can only faintly surmise. The Seip Mound, seventeen miles from Chillicothe at the horseshoe bend of Paint Creek, Ross County, Ohio, 250 feet in length, 30 feet high with a cubic content of approximately 20,000 cubic yards of earth took a team



A stadium



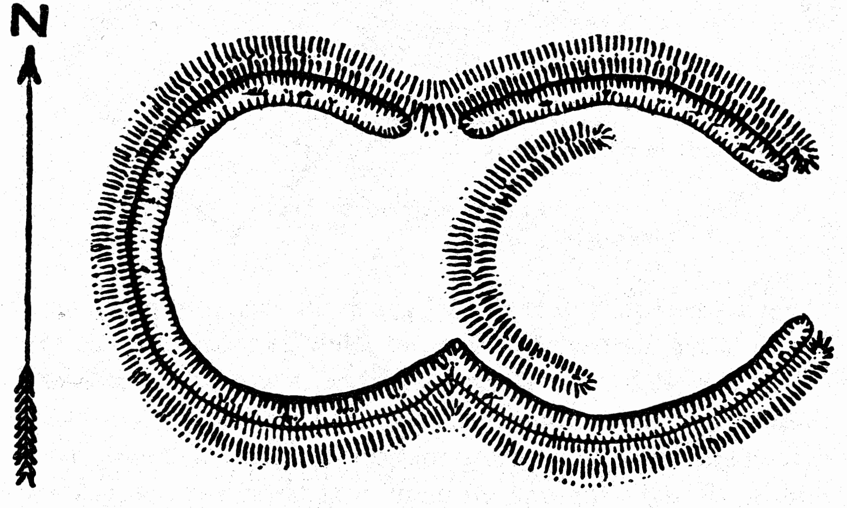
Rectangular enclosure

from the Ohio State Museum three summers of arduous labor to reduce and from which they recovered a rich array of artifacts including silver, mica, copper, tortoise shell and thousands of pearls.

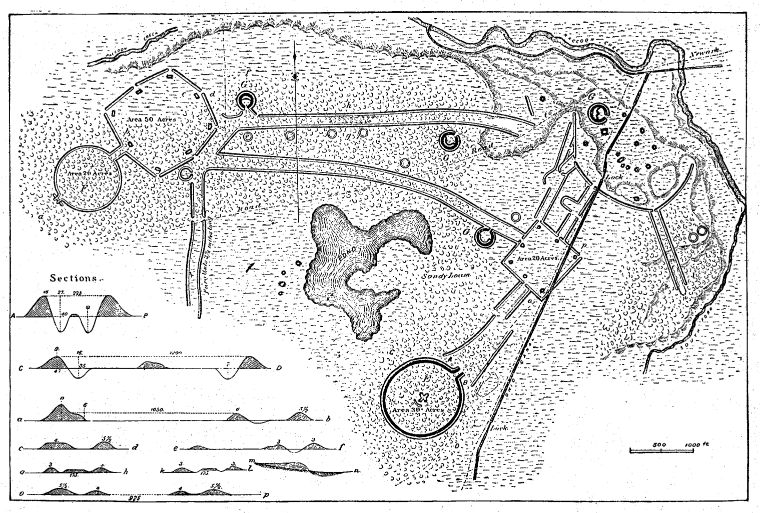
Other than mounds, a vast number of walled embankments called "sacred enclosures" noted by Thomas, extend from end to end of our island and of which those in the Kanawha valley of West Virginia might serve as an example. One of the more important forms a parallelogram with rounded corners, the length of which measured 420 feet and the width 150 feet with a wall from 4 to 6 feet high, an interior ditch and a single entrance at the south end. A second enclosure, circular in form measured 618 feet around the top of the embankment—with a ditch bordering the wall inside and one small entry-way. A third enclosure, also with ditch running around the interior, stood 264 feet long and 132 feet wide; a fourth, one mile away from this latter rectangular enclosure, only slightly larger, measured 287 feet by 150 feet, but one of the more interesting in this area extending a few miles along the Kanawha appeared to be a double circular embankment having two concentric walls with a ditch between them, the diameter of the outer wall being 295 feet and diameter of the inner 213 feet, the width of walls being 20 feet and width of ditch the same. Although plowed over and filled in for many years, the ditch was still about two feet deep when Thomas measured it. A broad gateway opened through the outer wall and ditch but the inner circular embankment seems to have been unbroken. These so-called "sacred enclosures" are found all over our island as well as on the "continent" as far north as Lake Houghton in Michigan.

One of the more unusual types of these embankments was described by E. G. Squires. This enclosure is located on the Kentucky side of the Ohio river some two miles below Portsmouth. The terrace on which it is situated is elevated

about 50 feet above the first bottom. "The principal work is an exact rectangle eight hundred feet square with walls twelve feet high by thirty-five or forty feet at the base. The most singular feature of this structure are its outworks which consist of parallel walls leading to the north-east and southwest. They are exactly parallel to the sides of the main wall and are each 2100 feet long, making the extent of the entire structure 5000 feet or a little less than one mile." Here Squier described an enclosure 800 feet on each side, walls twelve feet high and thirty-five feet at the base with two arms extending 2100 feet and being approximately one mile. How many man-hours went into the building of that structure? How many men would it have taken to carry baskets of earth to construct it?



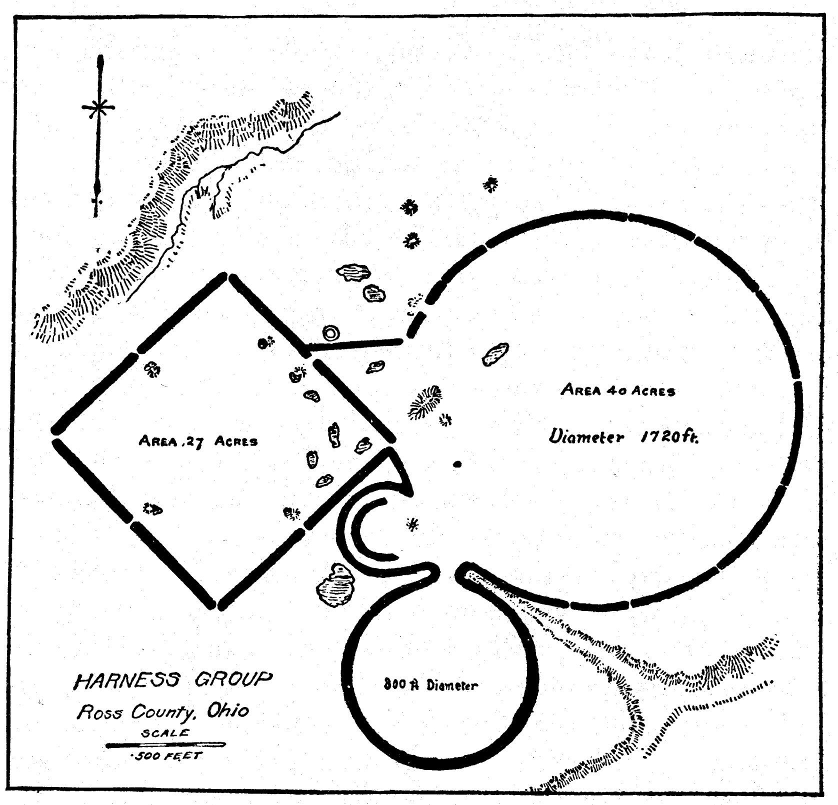
Double circle enclosure



Map—Newark works, Ohio

Perhaps best known and by far the most impressive are the famous earthworks around Newark, Licking County, Ohio. Not alone are these magnificent works spectacular in themselves but the engineering and mathematical knowledge that went into their construction transcends belief. Let it not be thought for one moment that these earthworks were insignificant isolated developments nor immaturely conceived for here once existed a highly cultured people who built an extraordinary complex of circles within circles, squares, rectangles, octagons and parallel walls extending over hundreds of square miles in southern Ohio—up the Muskingum to Newark, up the Scioto from Portsmouth, up the Miami from Cincinnati and along the Ohio river itself to Evansville in Indiana.

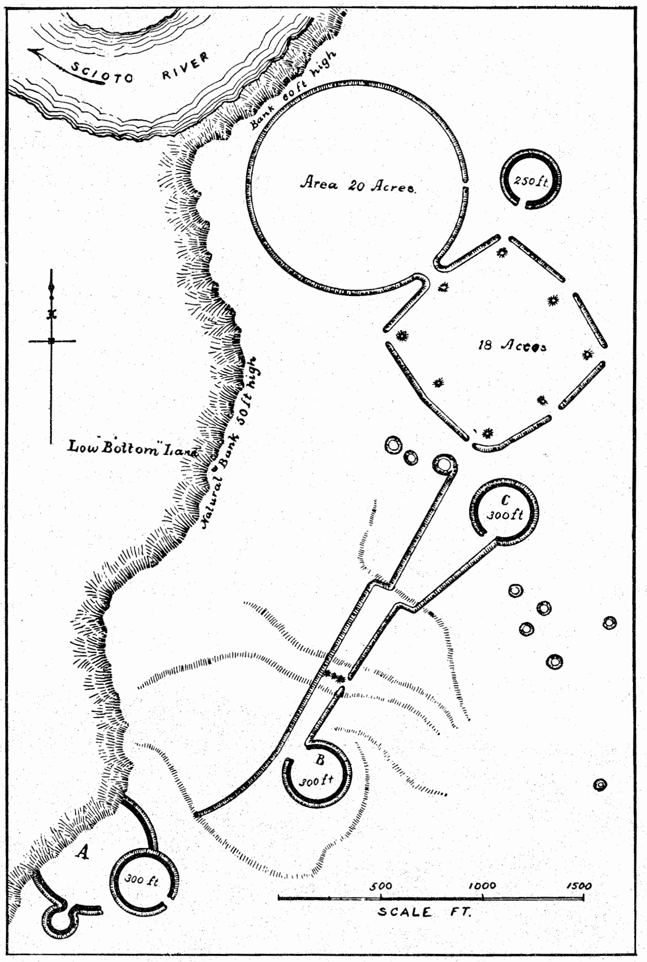
The Newark works, outstanding in complexity of structure, cover an area of nearly two miles long by over a mile wide and consist of two great circular embankments—that identified as the Fair Ground Circle of 20 acres, the



Map—Earthworks, Ross County, Ohio

other the Observatory of 30 acres; a square of 20 acres and an octagon of 50 acres, connected by parallel roadways—one of which led into the octagon of 2½ miles—with some fourteen smaller circular enclosures containing mounds. Within each of these embankments a ditch, or moat as Shetrone identified these ditches, or channels of Plato, had originally existed but at the time of survey had been largely filled in by the passage of time since its abandonment. The wall around the Fair Ground Circle enclosure varied in width from 35 to 55 feet and in height from 5 to 14 feet, the ditch varied from 28 to 41 feet in width with a then depth of from 8 to 13 feet. The Observatory Circle measured 1,054 feet in diameter with a circumference of 3,309 feet. Under the terrace immediately north of the entrance opening at the northern corner of the octagon, a strong spring of cool water gushed forth. When one contemplates these almost perfect circles well over half a mile in circumference, the parallel walls running for two and a half miles connecting one geometrical enclosure with another, it must be apparent that these ancient people had a vast knowledge of mathematics and a technique far surpassing anything known by historic Indians. Plato's preoccupation with circles enclosed by moats or channels, singularly coincides with findings here in southern Ohio and elsewhere in the Appalachians as does his notation with reference to man-power, for it was man-power, human hands, that created these far-reaching colossal structures. By now it must be apparent that these highly complicated features stem from persons having an advanced culture for these complex geometrical forms had no origin here—no trial and error period has been discovered that preceded this full-blown accomplishment so magnificently demonstrated in all parts of our island. Only one region at that early date is known to have possessed such knowledge and comparable proficiency in building construction and that area existed in the Eastern Mediterranean.

With reference to the approximate period of time when these mounds and embankments rose from the surrounding surface of the earth, in 1940, it was generally accepted by all professional archaeologists to have dated between 1200 A.D. and 1500 A.D., but by 1949, they were willing to concede that these structures might very possibly have had a beginning date as early as 500 A.D. With Dr. Libby's carbon-14 method of dating, what now has transpired? Everything prior to 1950, fossilized in "theory" instantly required re-evaluation. The Annis Mound group of Butler County, Kentucky, might serve as an example. Here



Earthworks, Ross County, Ohio

mounds produced dates of 5149 ± 300; 4900 ± 250; 7374 ± 500; Indian Knoll, Ohio County, Kentucky, 5709 ± 350; Sapelo Island, Georgia, 3800 ± 350; Ross County, Ohio 2285 ± 210. These dates range from 5000 B.C. to 285 B.C., indicating immediately the distortion of time which up to now we have been led to believe took place about one hundred years before the landing of Columbus. Perhaps more than any other single thing this should teach us that one discipline is not an island unto itself.

Turning aside now from mounds and embankments, we should like to consider village sites since Plato refers to villages. For this we shall turn to the report of Major William Webb—*Archaeological Survey of the Norris Basin in Eastern Tennessee* prepared in 1934, before the advent of carbon-14 dating, at the time of construction of the dam on the Clinch river, a small tributary of the Tennessee river just above Knoxville and a short distance from the spot where earlier we called attention to a stone inscribed in Phoenician characters recovered from a mound in Loudon County, Tennessee. And it will be further remembered that it was on the upper reaches of this Clinch river, above the dam, where we found the Melungeons living, the remnant of the Portuguese colony.

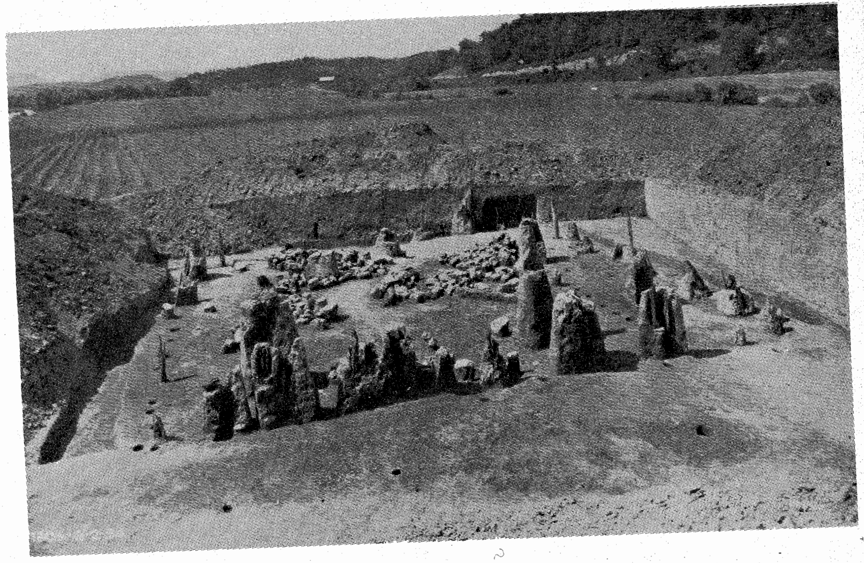


Plate VIII—Ancient building on Clinch River, Tennessee

Lest it not be overlooked, that which Thomas failed to demolish, the Tennessee Valley Authority totally obliterated by flooding. Today a large portion of this irreplaceable prehistoric construction lies under water beyond redemption.

In 1934, in the throes of a depression, the Federal government, in order to provide work for thousands of persons then unemployed instituted projects such as road building and dam construction—the Tennessee Valley Authority being one. At the start of construction preparatory to flooding of the Clinch river and during early stages of bulldozing, the A. H. Morgan Construction Company unearthed what appeared to them to be a number of ancient buildings and promptly notified Federal authorities. Smithsonian Institution was called in and they immediately dispatched Major Webb, an archaeologist, to investigate with sufficient authority to proceed in salvaging the site should he so decide. Importance of this specific area had been well known for many years and the desirability of an archaeological survey appeared obvious. However, nothing was done until construction actually started when last minute excavation came both too little and too late. Archaeological work started on 1 January 1934 and terminated 1 July 1934—six months. That which was excavated amounts to a mere pittance—the greater portion of this vast prehistoric site now flooded beneath waters of Norris Lake.

At the outset, Major Webb was handicapped. Employment of those necessary to him came from rank and file of unemployed unskilled labor with daily turnover and constantly changing personnel assigned by Civil Works Administration—men totally untrained for serious archaeological excavation. Chilling results stemming from this need not be stressed here. In his final report covering six months' work, Webb listed 23 sites investigated which included 29 mounds—12 burial mounds and 17 associated with prehistoric structures—54 wooden structures 20 of which were thought to be dwellings while the remaining 34 were designated as "town-houses" all within a 25 mile area. Within this same 25 miles, Webb's survey plotted 13 additional prehistoric village sites none of which he touched. In the general region of the Appalachian range in Tennessee, Kentucky, Georgia, North Carolina and Alabama, some 25 other dams have been constructed flooding river valleys along which hundreds of prehistoric villages once existed but no longer exist and in most instances were not recorded. With this demolition some slight appreciation of density of population about which Plato wrote might be better understood. Thousands of small tributaries and creeks flowing into major waterways—the Little Tennessee, Tennessee, Cumberland, Hiwasee, Kanawha, Coosa, Holston, Licking—each provided home sites for a vast population and what Webb reported for a 25 mile area held equally true for several thousand square miles throughout this region.

In examining one of the first of a series of mounds forming Site No. 2, known as Bowman Farm Mounds at Agee, Campbell County, Tennessee on the Powell river about 4 miles above its junction with the Clinch, Webb noted no surface evidence of prehistoric occupation but on excavating a ridge of earth some 150 by 100 feet high, he discovered two mounds each nearly circular. Trenching outside the mound area he uncovered a village site of several acres but due to long cultivation of the land and gradual erosion of the soil, trace of this village had been almost obliterated. In stratifying mound No. 1, the larger of the two which measured some 90 feet in diameter, Webb ran across yellow and red clay deposited in pockets and the contrast in color impressed him for he so noted and, although he trenched down to the floor, he gave no indication of depth of the yellow/red clay. Again at mound No. 2, he reported yellow and red clay intermixed and

resting on a humus layer 15 inches thick, the apex of the mound being 30 inches above the humus line. One structure appars to have been superimposed on an earlier one for two separate floors were plotted, the secondary floor uniformly 4½ feet above the primary. At the time the secondary floor had been plotted, workmen removed earth outside the structure and when their shovels were forced into the earth just outside the line of post molds marking off the wall, they encountered enormous slabs of yellow and red clay from the top of the structure down to the level of the primary floor and, as Webb noted: "the earth beyond the cleavage plane was darker in color and did not consist of a pure red and yellow clay as did that encountered outside." Here again, as Thomas found, and so noted by archaeologists at Russell Cave, Webb ran into a layer of yellow and red clay. Each time this strange situation was reported as something unexpected, no one accounted for it. The Bowman Farm site stands some 150 miles northeast of Russell Cave where conditions of the soil bear no relationship one with the other. A highly unnatural condition such as this in widely separated areas, each with burials and artifacts deep inside under the yellow/red clay layer must somehow be explained as it does not fall within the realm of coincidence.

At these village sites, Webb distinguished between private dwellings and town-houses. Town-houses bespeak community meetings or gatherings for many were of considerable size measuring 37.5 by 36.5 feet. Town-houses, as was true of a majority of structures that Webb examined, were erected of large red-cedar posts averaging 14 inches in diameter. Consistent use of red-cedar harks back to Egyptians who had no wood of their own so preferred cedars from Lebanon which gave a pleasing odor to their buildings. Webb noted that despite long burial these town-house cedar posts gave off the usual odor of red cedar. Ancient builders appreciated the aromatic wood which served also as a protection against certain insects.

Insofar as construction itself is concerned, Webb sketched out in architectural detail the method employed by builders showing emplacement of a series of upright logs forming the wall with a horizontal log placed outside at the bottom of the trench 20 inches below the floor and a second horizontal log inside the wall just below the interior floor. This placement of horizontal logs at these two levels gave maximum stability and rigidity to the structure. Rather surprisingly, Stuart Piggott in his fascinating book *Ancient Europe* shows somewhat the same detailed method of construction dating from the second century B.C., in Trier, Germany and W. B. Emery in his book *Archaic Egypt* likewise shows this type of construction dating from the Second Dynasty and states that the most common method was achieved with closely set wooden joists and planking and when a very large area was to be covered, the joists were supported by longitudinal beams.

We should now like to consider the matter of fortification for Plato spoke of military strength—armed men and charioteers. Thomas tells us of bastions and towers which apparently stood as defense works to protect the army as well as the inhabitants. Early writers—Judge John Hayward, the Tennessee historian; John Brown; Lucian L. Knight; Albert J. Pickett, also historians—told stories of forts located in mountainous regions particularly around Chattanooga—Old Stone Fort 70 miles west of Chattanooga; the fort on top of Lookout Mountain and Fort Mountain in Georgia southeast of Chattanooga. Old Stone Fort consisted of an irregular triangle of more than 50 acres formed by high bluffs rising from the river, walls of stone and flint which rose to 20 feet above a moat. Judge Hayward stated that the moat, in his time, was 20 feet deep and the walls formed an effective and skillfully

designed defensive system. At Fort Mountain, walls were built in a succession of salient angles each forming space for half a dozen men—reminiscent of the defense works at Sacsahuaman. This fort, the highest of all, had a defensive wall of 855 feet long. At one point an entranceway led out to a spring and the report stated that the fortification was built with the skill of trained military engineers and it was further noted that it would have been impossible for more than one man to pass at a time and that even the slightest push would have sent him hurtling down the rocks for 150 feet over the cliff. Judge Hayward stated that in the construction of these old forts an ancient type of cement, unknown to archaeologists in his day, had been employed in these defense works. If that be so, attention might be called to a similar circumstance noted in our earlier work where a substance known as hormozo, an ancient binding material, had been employed in building the castle or fortification at Niebla, on the Rio Tinto, in southern Spain and there it was thought that the work and binding material stemmed from Phoenicians. We would like also to recall the unusual cement objects found off Bimini composed of slaked lime and volcanic tuff, the oldest known hydraulic mortar.

From this extensive building operation, where one worker observed on reducing a mound that it must have taken 100 men over a century to erect it, the reader can determine for himself the enormous man-power once inhabiting this region of Appalachia. Theodore H. Lewis, surveyed a total of over 22,000 mounds in western Mississippi; 3000 mounds in one county of Ohio; 2000 mounds throughout the states of Georgia, Alabama and Tennessee that Thomas excavated and to the north of the Ohio river mounds can be found in Illinois, Iowa, Indiana, Michigan, Wisconsin and Minnesota. The sum total is unknown.

We are reluctant to leave this chapter on man-power without touching on the perennial controversy as to the builders of these mounds—who were these men? Their numbers would have run into the millions. In chapter VIII, we noted that in 1890, the Director of the Bureau of American Ethnology, Smithsonian, concluded that these mounds had been built by ancestors of the historic Indian, the Cherokee, Choctaw, Yuchi and Natchez during the 15th and 16th centuries A.D. Eighty two years later, in December, 1972, George Stuart of Smithsonian, writing on the Mound-builders, said again that ancestors of the historic Indian constructed these mounds. However, he placed the date as about 2500 years before Columbus—around 1000 B.C.—this change in date determined by nuclear physics, but no change in opinion as to the original builders.

At the time of colonization prior to and following the Revolutionary War, many scholars questioned the Indian Chiefs on construction of mounds. The answer consistently given was that their ancestors did not build them; that they knew the mounds were not a natural formation and that some race of people unknown to them who disappeared before their fathers, built them. Amongst those writing on this perplexing subject were such eminent persons as Dr. Ezra Stiles, President of Yale College, Benjamin Franklin, Thomas Jefferson and Noah Webster. Dr. T. M. Harris of Massachusetts, writing at the turn of the 19th century, observed that the skill and culture shown in the construction differed from that of the present Indian and was of sufficient proof to imply that the hand of some superior race with a higher education would have built the mounds. Dr. Benjamin Barton, writing in 1797, noted that the mounds were not built by the living Indians or their ancestors but by a people of higher cultivation with established law and order. These records were set down very early in our history at a time when the Indian still roamed the countryside and still retained memory of traditions of his people.

In considering this highly volatile subject, several matters, in addition to the Indian's own disclaimer, merit taking into consideration—the Indian was nomadic, a hunter, who travelled alone or in relatively small bands; he lacked the large-scale organization required to construct the thousands of mounds; he is not known to have worked in stone—such as the fortifications or mile long walls; neither he nor his ancestors were mathematicians—witness the circles a mile in circumference, not one but literally hundreds, perfect octagons, squares, squares and octagons within circles, parallel walls protecting roadways a mile or more long, all mathematically accurate, embankments with moats inside or outside, again mathematically precise. These features require a high degree of sophistication as well as mathematical skill which the Indian lacked and which no knowledge had been transmitted to him by his predecessors. At the time of colonization, no mounds were discovered in the process of construction. No reason is given by those who attribute to ancestors of the present Indian for the complete loss of knowledge or skill in mathematics and total loss of memory since neither folklore nor legend tells of these mounds. The Indian claims they were not Indian—Smithsonian claims they are.

If as early scientists believed, that some other race constructed the mounds—and we now know in a period of time "2500 years before Columbus" or around 1000 B.C.—then would it be unthinkable to look to other quarters of the globe to see whether or not any other peoples built such mounds in that same period of time? Ample confirmation can be found throughout the Eastern Mediterranean during Mycenaean times. In the *Odyssey*, Homer (XII:8-15) tells us that after the death of young Elpenor, they buried him with his armour and heaped over him a mound planting his oar on top. Quintus Smyrnaeus (Book III:735-742) notes that after his death in the Battle of Troy, the mighty Achilles was buried in a casket and his comrades heaped over him a barrow of giant size standing upon the foreland of the Hellespont. This is the huge mound around which Alexander marched three times. Taking this giant mound over the slain Achilles as a prototype, in size and construction, mounds throughout Ohio, Tennessee, Georgia, Kentucky and elsewhere in southeastern United States, stand as counterparts.

In view of the many known records of an ancient people having a high degree of sophistication as well as a knowledge of mathematics at a period of time roughly around 2000-1000 B.C., known to exist in Greece and other Eastern Mediterranean countries, and now to find that same high degree of mathematical skill displayed in the construction of our mounds, one wonders why we are forced to remain blind in declining to relate one to the other—to persist that every unexplainable situation must have been accomplished by ancestors of the historic Indian. Scholars abroad have been very critical of our attitude and our failure to consider that anything might have originated outside of these United States before the voyage of Columbus. At the 1968 International Congress of Americanists, meeting in Stuttgart, Dr. Italo Signorini of Rome, spoke rather forcefully on this subject. In part, he stated: "On one side, we find almost all North American and Central and South American archaeologists and ethnologists, particularly those coming from countries directly concerned, united on a decidedly negative outlook on the problem. The former show an ingrained opposition to working hypotheses which imply long range diffusion phenomena, this being the not wholly unjustified aftermath of diffidence towards the results of the historical and cultural school of thought; the latter are affected mostly by a misdirected sense of nationalism which brings them to deny any possibility of external influence on the higher cultures of the past as an hypothesis damaging to national pride (as

if Classical cultures for example had been unaffected by such influence); thus they can bask in the reflected glory of the cultural accomplishments of those who, strange to say, are the ancestors of exactly that part of their national populations which is constrained at their lowest social levels by fragile arguments essentially based on an assumed moral and intellectual inferiority. Dogmatism and emotion are thus the chief basis of 'isolationist' opposition, which however also rests on some assumptions which more accurate research is gradually destroying." Dr. Signorini thus epitomizes sentiments of scholars the world around—an opinion to which we in the United States lend deaf ears and to which we have been rarely exposed.

The hundreds of thousands of men who constructed these mounds throughout the southeastern region of the United States, in itself, presents evidence of a highly skilled and organized population living here bearing out Plato's indication of the vast number of persons once existing on the island of Atlantis—people who suddenly disappeared.

DESIGN

CHAPTER X

In the period of time of which Plato wrote, certain designs played an important role in every-day life either from an aesthetic standpoint or as symbolism from a religious one and while we have no knowledge of what feelings that symbolism conveyed to those ancient peoples, it apparently struck some deep chord within their consciousness. Two such outstanding designs found on our island of Antillia revert back to a time and place in the Eastern Mediterranean—the well-known "key" or "meander" design of ancient Greece and the double-axe of Minoan Crete.

Design itself falls into two categories—functional and nonfunctional. Functional design implies some usage or arrangement in connection with a function and, in the history of man, is of comparatively recent date since its common usage is industrial. Non-functional design, on the other hand, has been with us since time immemorial. It has eye appeal but no function. It merely decorates or ornaments a given space or, as in the case of a religious or symbolic use, it calls to mind something to be remembered or worshipped. Religious design can best be illustrated by a Cross symbolic to Christians, the Star of David to Jews, a Star and Crescent to Muslims. Each member of such religious group understands perfectly what that symbol means to him. Symbols stir the emotions and for a symbol men have died—for a Cross or a flag.

First of our designs, the Greek "meander" by far the

most common of any design, has undoubtedly survived longest for it repeats itself in wave or geometric variation around the globe. The familiar story is told that this design originated with Greek soldiers stationed in Asia Minor, having nothing better to do, followed the sinuous course of the Menderes river—a story with little foundation. Greece, its traditional home, has applied this design to any and all empty space available. Geometric modifications together with the wave pattern found in mosaic on the island of Delos and in the museum at Heraklion, have been duplicated in eastern United States on bowls and jars recovered from the Etowah mound in Georgia as well as from the Seip mound in Ohio. This design can be found in certain areas of Mexico. Typical wave or running designs are pictured in *The Mound Builders* by Henry Shetrone and by Warren Moorehead in *Etowah Papers*. The geometrical variation in its most magnificent form covers the entire facade of the spectacular ruins at Mitla—walls 20 feet long and 10 feet high pieced together with tiny perfectly matched stones. Walls of the highly unusual cruciform tomb at Xaaga, State of Oaxaca, are similarly covered. The meander runs up the face of El Tajin. Wherever this design appears, it bespeaks of common heritage.

The second design from this period, is the Double-Axe of Minoan Crete. Again, what philosophical reaction this symbolic Axe conveyed to an ancient Minoan as yet no one can fathom—but that it was used as a religious symbol in some form there can be little doubt. More than any other one symbol, this double-axe typifies Minoan Crete. Even today on the stone walls of the Knossian palace can be seen carved symbols of this double-axe while in the museum at Heraklion a long row of double-axes, made of copper and of large size, stand majestically on tall standards against one wall. That the symbolic double-axe played an important role on Crete, is generally accepted.

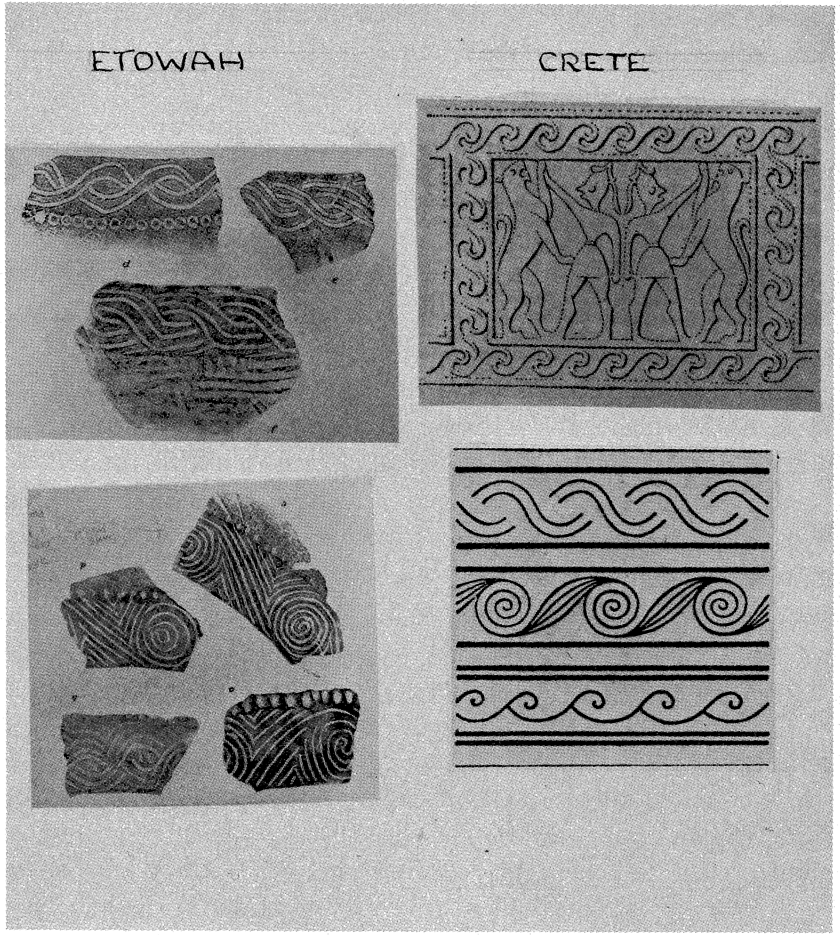
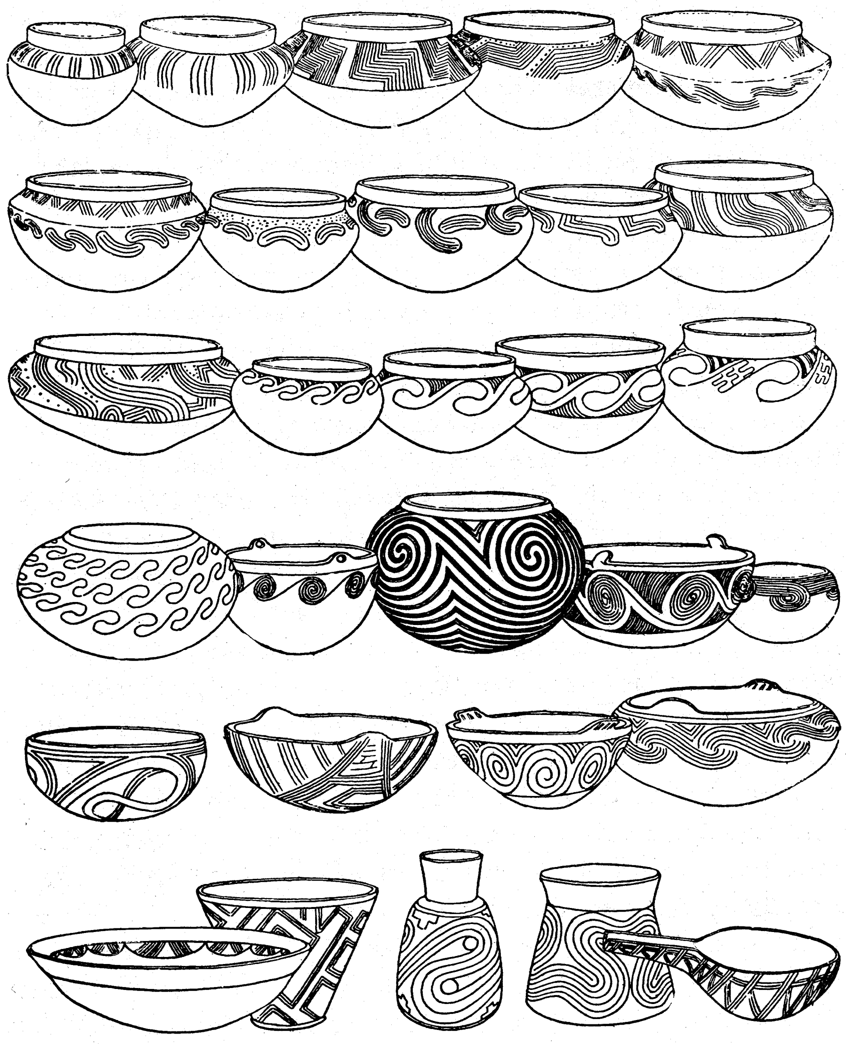


Plate IX—Variations of running wave design



Ceramic bowls from Alabama Mounds with running wave design

Yet, when this identically designed form appears amongst archaeological specimens recovered from mounds in the United States, controversy arises. This distinctive design (which in shape might be likened to a man's bow tie) turned up in all parts of our island and in extraordinary quantity along the Ohio river. To an archaeologist this double-axe is known as a "banner-stone." Beautiful specimens have been found in Ohio, Indiana, Illinois, Michigan and Wisconsin. Materials of which they were made consisted of copper, quartz, banded slate and spotted granite and range in size from one inch up to five or more inches and in weight from an ounce to several pounds.

Byron Knoblock, authority on banner-stones, after spending the better part of a lifetime examining hundreds of specimens, came to the conclusion that these distinctive shaped stones were ceremonial or symbolic, and religious in nature, that the drilled hole through the center formed an opening for a staff or standard. He stated: "It seems very apparent that the banner-stones made at an early period were used as symbols and were placed on the end of staffs." "Another conclusion may be considered regarding these stones as having a sacred significance. It may be supposed that they were used by clans and tribes during altar ceremonies. For this purpose they were mounted on the ends of staffs and inserted in the ground." Even more significantly, Knoblock observed: "The only written history concerning the pre-Columbian people of America is a few records by early explorers; yet there seems to be no written information concerning banner-stones. If, however, the aborigines did make or use these objects at that time, the early explorers failed to mention anything about them in any of their writings; and the Indians of the present day are unable to throw any light on the subject although many of the tribes, as well as other primitive races in different parts of the world, still preserve traditions and legends that

extended into the past 200 or 300 years. Yet no legends exist among the Indians today concerning banner-stones, and had any legendary knowledge of them ever existed, it has been lost." As Knoblock stated, no Indian was ever seen to use a banner-stone nor did they know its purpose.

Knoblock published letters and photographs sent to him by many persons interested in banner-stones, amongst whom was George A. West who, in 1936, forwarded to Knoblock a photograph of a copper banner-stone stating: "The copper came from the Isle of Royale, Lake Superior. This specimen is unique because it is the only copper banner-stone so far found with curved blades." Knoblock in reproducing the photograph identified it as a "double bitted axe" although he apparently failed to relate it to the double-axe of Crete, he was sufficiently astute to recognize its design as a double-axe. In the explanation accompanying the photograph, the following information was taken from an atricle published in the *Wisconsin Archaeologist*, Vol. 15, concerning the finding of this specimen in 1916 by a construction contractor: "Examination showed that it was of copper and shaped somewhat like the two bladed battle axe of ancient and medieval times. Each cutting edge measured about five inches while the distance between the two edges and at the median point was likewise five inches. Through the center, an eye or hole for the handle had been neatly punched. This orifice was nearly round and about ¼ inch in diameter. The implement had been fashioned from a plate or flake of native copper nearly half an inch at the center, but hammered out very thin on either side as it approached the edge of each blade or bit. The whole outline showed a remarkable symmetry although slightly rough on the edges from hammering or from corrosion. The weapon or ceremonial was found fully six feet below the surface."

We now turn to a more recent identification of this

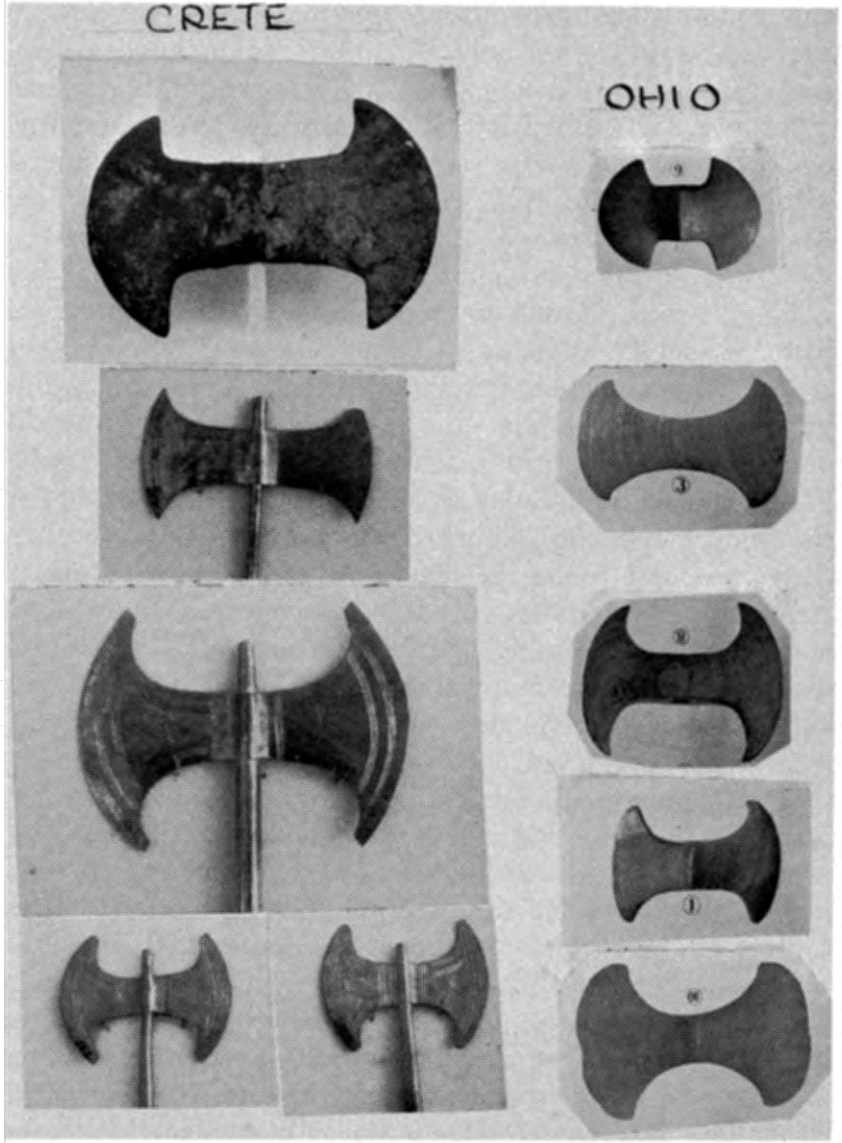


Plate X—Double Axe-Crete-Ohio Photo-From Crete by John Kurtich

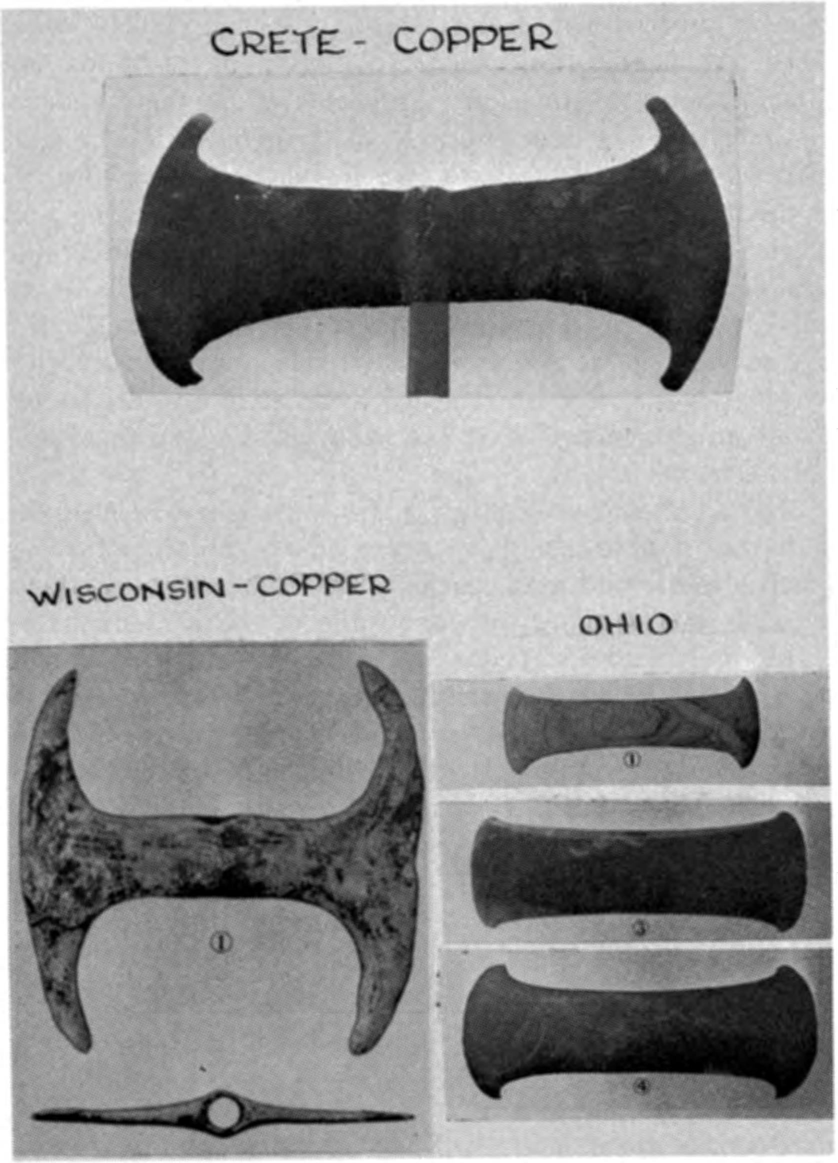


Plate XI—Double axe-Crete-Wisconsin-Ohio
Photo-From Crete by John Kurtich

unique design published in 1966 by one of our better known professional archaeologists, Gordon Willey, who listed the banner-stone in the Glossary of his book *An Introduction to American Archaeology* in these words: "Bannerstone: a stone atlatl, a throwing stick weight, placed on the stick shaft to give greater propulsive force to a thrown dart. The stone is perforated for hafting and often has a bipennate, 'butterfly' or banner-like appearance." This identification of the double-axe as an atlatl weight conforms to present-day acceptance by archaeologists. The archaeologist fails to explain how such a weight could have been attached to an atlatl and the Indian to whom they attribute it and who still uses an atlatl, did not recognize it.

Each of these two highly distinctive designs—the meander and the double-axe—are recognized as coming from a specific locale and at a specific time. Their place of origin is well established. Both are unique. Both designs are classic and symbolic. The meander design has been depicted on bowls and ceramic specimens recovered from mound in Eastern United States as well as from Mexico—the double-axe of Crete from along the Ohio river and adjoining states.

While design was not referred to by Plato, yet these two highly distinctive designs were in common usage throughout Greece or Crete during the time of which he wrote and identical designs are found on our island in profusion.

POSEIDON'S HOLY ISLE

CHAPTER XI

The regal palace to which Poseidon brought Cleito, his bride, stood on a small island in the very center of the large island of Atlantis. Encompassed round with a wall of gold, the holy ground was held sacred to the royal pair. The palace within the acropolis was covered on the outside with silver and gold, the roof they made of ivory. In the interior, walls and pillars and floors they coated with orichalcum and placed golden statues along the walls, one being that of the God standing on a chariot driving six winged steeds. Outside round about the palace, there stood images in gold of all the princes as were descended from the original ten kings. The splendor of the palace and its grounds befitted the natural beauty of the land as well as the greatness of the kingdom and bespoke wealth, leisure and sophistication.

In the very center of our island of Antillia once stood the most important and impressive of mounds—the Great Etowah Mound some 30 miles north of Atlanta. Plato's location of Poseidon's palace and its regal splendor might well relate to this majestic structure. Plato told us that in the very center of the larger island a smooth plain extended some 300 miles long and 200 miles wide, facing south toward the sea and sheltered from northerly winds by mountains celebrated as surpassing all in magnitude and beauty. About the center of the plain where Poseidon erected his palace at a distance of some six or eight miles, stood a low mountain. Such a plain as Plato described does in fact exist. Facing south along the Gulf Coast from Apalache Bay to Mobile Bay and north as far as Chattanooga, a plain of exact size stretches throughout Alabama. In the north, what range of mountains rise more stately and magnificent to protect this region than our renowned Great Smokies–Plato's mountains of surpassing beauty that shelter the area from northern blasts?

About the center of this island, from north to south, as well as from east to west, Poseidon built his palace. Fifty stades, or about six miles away, stood a mountain low on all sides. This low mountain appears to be Kennesaw Mountain which rises about eight miles southeast of the Etowah Mound. Kennesaw Mountain has been described by Lucian L. Knight in *Georgia Colonial Records* (Vol. 1:208): "Two miles north of Marietta looms one of the most conspicuous land marks of Georgia; historic Kennesaw mountain. Even to the mere physical eye it is an object of intense interest. For miles in every direction it dominates the landscape. Its peculiar shape, not unlike the hump of a dromedary, its great height and its singular location give it an aspect of strange impressiveness."

Stone Mountain, 16 miles east of Atlanta and thus a short distance farther from Etowah Mound than Kennesaw Mountain, might well have been the mountain referred to by Plato were it not for these additional few miles for Stone Mountain, like Kennesaw, looms impressive on the horizon. Of Stone Mountain, Knight tells us: "In some respects there is not a landmark in America to compare with the gigantic boulder which towers 16 miles east of Atlanta. Rising out of a comparatively level and monotonous area of country, it is certainly unparalleled as a curiosity of nature, if not the largest solid mass of exposed rock on the continent. It rises to an altitude of nearly 2000

feet above the sea, is between 6 and 7 miles in circumference at the base and towers above the surrounding plain like an Egyptian pyramid. Farther back in time an ancient wall encompassed the mountain but not a trace of it remains. Behind it there doubtless lies the story of some tragic convolution in prehistoric times."

In 1830, the Macon Georgia *Telegraph* published an article about Stone Mountain which in part stated: "About one quarter mile from the top are seen the ruins of an old fortification which formerly extended around the summit, and which was built to guard every approach leading thereto, the only entrance being through a natural passage under the loose rock, where only one person could enter at a time, by crawling on all fours. The whole length of the wall at first was probably a mile, breast high on the inside. It consisted of loose fragments of rock. There is nothing to tell us by whom the structure was built." One more notation with reference to Stone Mountain from Georgia records: "Among the curiosities of the mountain–the ruins are deserving of notice. Ruins of a fortification once surrounded the crown of the mountain. When, or by whom, it was erected is unknown. The Indians say it was there before the time of their fathers."

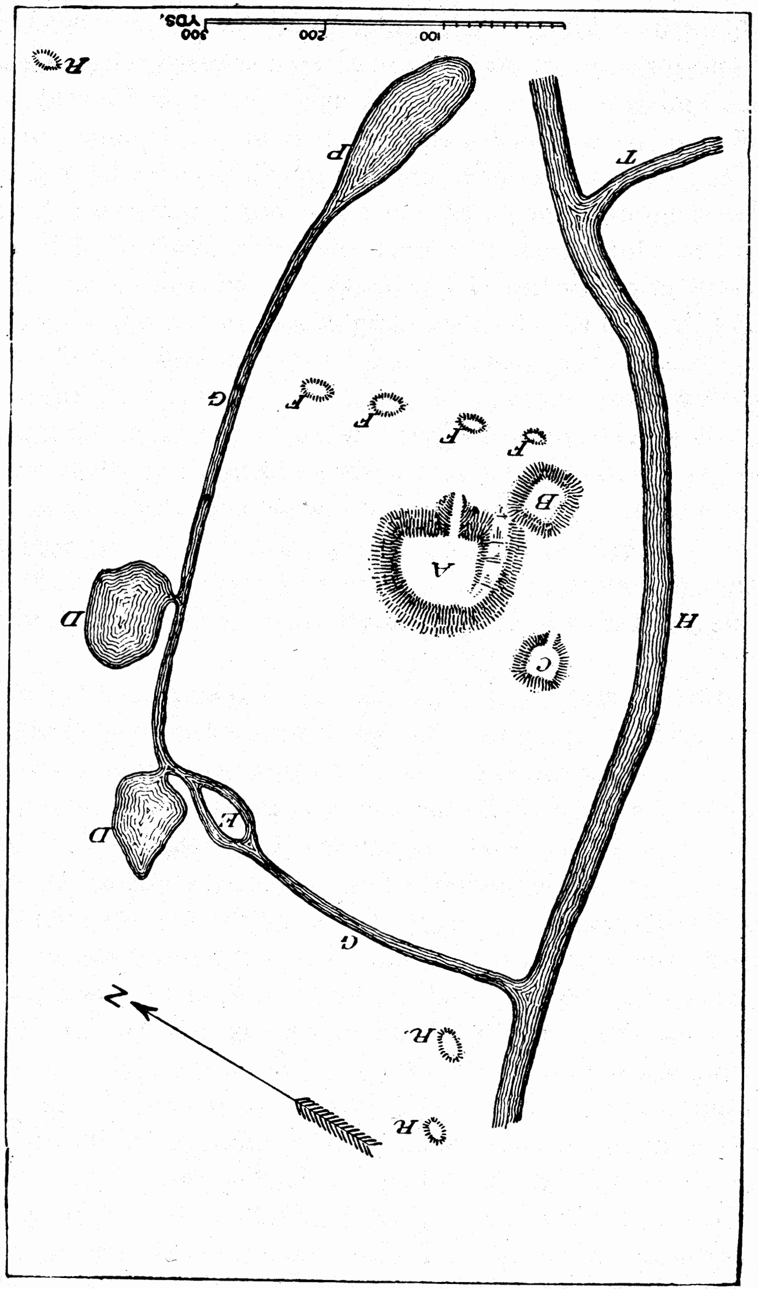
While Kennesaw Mountain meets the mileage requirement, yet Stone Mountain a few miles more distant could equally qualify. Here on Stone Mountain once existed an ancient fortification the builders of which were unknown to Indians, certainly unique amongst fortifications for the natural passage permitted only one person at a time to enter and he on hands and knees. The distance around the wall is given as one mile. Knight places the time as "prehistoric."

With reference to Etowah Mound itself, early explorers–particularly Rev. Elias Cornelius and Col. Charles C. Jones, supplemented by Thomas and Moorehead–tell their own story. The first published account, in 1818, is that of Rev. Cornelius who reported: "I have but one more article of curiosity to mention under this division. It is one of those artificial mounds which occur so frequently in the western country. I have seen many of them and read of more, but never of one of such dimension as that which I am now to describe.

"It is situated in the interior of the Cherokee Nation, on the north side of the Etowee, vulgarly called the Hightower river, one of the branches of the Koosee. It stands upon a strip of alluvial land called river bottom. I visited it in company with eight Indian Chiefs. The first object which excited attention was an excavation 20 feet wide and in some parts 10 feet deep. Its course is nearly that of a semi-circle, the extremities extending toward the river, which forms a small elbow. I had not time to examine it minutely. An Indian said it extended each way to the river, and had several unexcavated parts which served for passageways to the area which it encloses. To my surprise, I found no embankment on either side of it. But I did not long doubt to what place the earth had been removed; for I had scarcely proceeded 200 yards when through the thick forest trees, a stupendous pile met the eye, whose dimensions were in full proportion to the intrenchment. I had at that time no means of taking an accurate measurement. To supply my deficiency I cut a long vine, which was preserved until I had an opportunity of ascertaining its exact length. In this manner, I found the distance from the margin of the summit to the base to be 111 feet. And, judging from the degree of its declivity, the perpendicular height cannot be less than 75 feet. The circumference of the base, including the feet of three parapets, measured 1,114 feet. One of these parapets extends from the base to the summit, and can be ascended, though with difficulty, on horseback. The other two, after rising 30 or 40 feet, terminate in a kind of triangular platform. Its top level, at the time I visited it, was so completely covered with weeds, bushes and trees of most luxuriant growth that I could not examine it as well as I wished. Its diameter, I judged must be 150 feet. On the sides and summit are many large trees of the same description and of equal dimensions with those around it. One beech tree near the top measured 10 feet 9 inches in circumference. The earth on one side of the tree was 3½ feet lower than the opposite side. This fact gives a good idea of the mounds declivity. An oak, which was lying down on one of the parapets, measured at the distance of 6 feet from the butt, without the bark, 12 feet 4 inches in circumference. At a short distance to the southeast is another mound, in ascending which I took 30 steps. Its top is encircled by a breastwork 3 feet high, intersected through the middle with another elevation of similar kind. A little farther is another mound which I had not time to examine.

"Of these great works of art the Indian gazed with as much curiosity as any white man. I inquired of the oldest chief if the natives had any traditions respecting them to which he answered in the negative. I then requested each to say what he supposed was their origin. Neither could tell, though all agreed in saying, 'they were never put up by our people.' It seems probable that they were erected by another race who once inhabited the country. That such a race existed is now generally admitted. Who they were and what were the causes of their degeneracy or of their extermination no circumstances have yet explained. But this is no reason why we should not, as in a hundred other instances, infer that existence of the cause from its effect, without any previous knowledge of its history."

This account, written in 1818, by Rev. Elias Cornelius, details first knowledge that we have of this spectacular mound which excited his curiosity and it tells of the



Map of Etowa by Jones

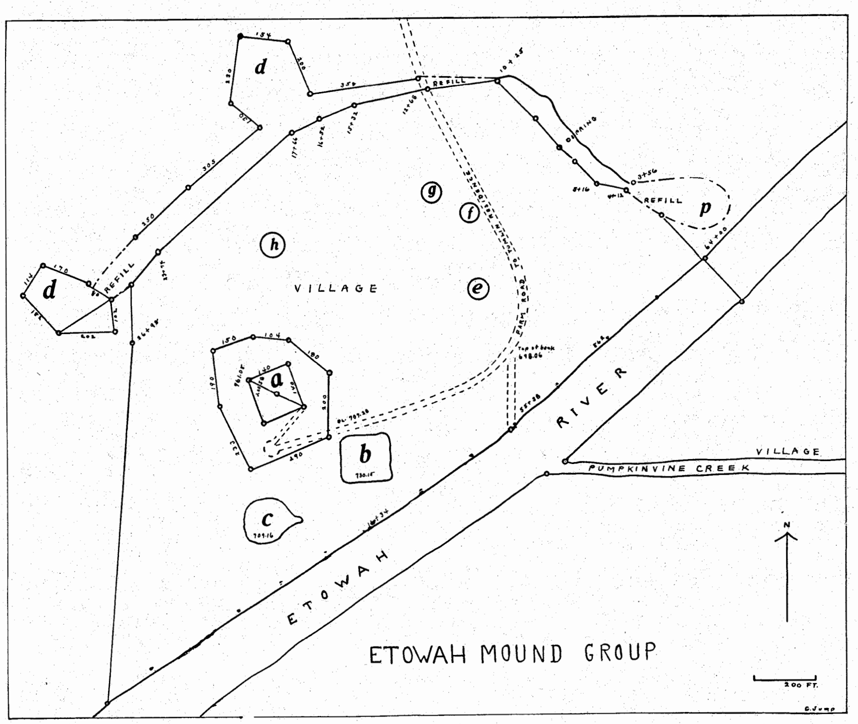
condition of the mound as he found it before cultivation by later settlers. As in all other instances, he reports that the oldest Indian Chief looked upon these great works with as much curiosity as the white man, having no knowledge or tradition of their builders and asserting these structures stood before the days of their fathers.

Col. Charles C. Jones likewise contributed important information concerning the Etowah Mound. Jones described this mound as the most remarkable within the State of Georgia, situated in the midst of a beautiful fertile valley, having an area of some 50 acres, bounded on the south and east by the Etowah river and on the west and north by a large ditch or artificial canal which joins the river. This moat, or ditch, as Jones gave dimensions, varied in depth from 5 to 25 feet and in width from 20 to 75 feet with two reservoirs of about an acre each having a depth of not less than 20 feet with a third pond at one end. Jones, perhaps more than anyone else who has described this Etowah Mound, seemed to appreciate its significance for he stood in wonderment and awe as he described its impressive form, a monument of past ages, venerable in its antiquity, solemn and silent, yet not voiceless–a remarkable exhibition of the power and industry of a former race. Jones' details of measurement closely parallel those of Cornelius. Perhaps the most significant description came from Jones for he recognized the religious aspect of this mound to a greater degree than any other observer. After placing the mound as to location and size, Jones stated: "The established approach to the top is from the east. Its ascent was accomplished through the intervention of terraces rising one above the other–inclined planes leading from one to the other. These terraces are 65 feet in width and extend from the mound to the southeast. Near the eastern angle, a pathway leads to the top; but it does not appear to have been intended for very general use. May it not have been designed for the priesthood alone, while assembled upon the broad terrace the worshippers gave solemn heed to the religious ceremonies performed upon the eastern summit of this ancient temple?"

Here on this small island, within the larger island of Atlantis, we sought a temple befitting Poseidon. Here Jones conjectures that upon this Etowah Mound stood a temple—one with a narrow pathway leading to the topmost pinnacle—not intended for general use but for a priest alone.

Thomas "explored" this mound with his usual thoroughness leaving little of the original for later study. He provided a more or less routine description devoid of the excitement and awe exhibited by both Cornelius and Jones—although he did describe the large mound as a truly grand and remarkable structure. His matter-of-fact recitation however does convey information concerning conditions as he found them in the 1880's after years of cultivation had filled the ditch and one of the large ponds to create greater acreage for farm land. His report is of value also for descriptions of grave goods found upon excavation which he detailed with great care. A large proportion of these strange artifacts are of extraordinary significance particularly copper plates engraved with dancing figures reminiscent of Mexico of which there were many. We shall not concern ourselves with these specimens here but refer the reader directly to the Thomas Report itself.

Moorehead's account published in 1932, summarizes earlier material from Col. Whittlesey and Willoughby both of whom wrote valuable reports at some length on the Etowah Mound. Col. Whittlesey stated that at the time of his visit in 1871, extension of the western ditch continued to the river. Moorehead concluded that the then owner in 1932 had filled in both ditches. Moorehead's map (p. 67)



Map of Etowah by Moorehead

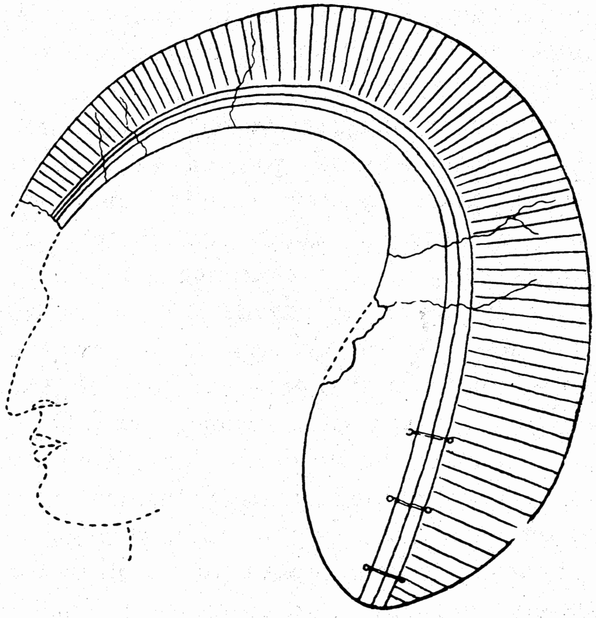
plots out the ditch which Plato referred to as a channel and, while the ditch as Moorehead shows it is not a perfect circle, yet it forms a semicircle around the mound connected to the river—the river forming the remaining arc of the circle and thus forming the island on which the palace stood. Plato (Cri.116A) gives the dimension of this island on which the palace stood as having a diameter of five stades—roughly 3000 feet. Moorehead states that the ditch surrounding the mound quite surprisingly extended 3000 feet along the river! This particular channel is of further interest for it may well have been the specific one which Plato associated with the three outer harbors, for on Moorehead's map as well as on the earlier maps of Jones and Whittlesey, two large basins are shown with an indication that a third formerly existed but had been filled in. Moorehead gives the dimensions of these three basins both of which he shows as pentagons the sides of one measuring 102 feet; 202; 182; 114 and 250, and the other basin 130 feet; 230; 154; 200 with the remaining side open. Of the 250 feet noted on one side of the first basin, 70 of those had been filled in. Distance between these two basins he noted as about 800 feet and while he gives no measurement for width of the channel, according to the scale which he employs it would have measured about 100 feet or one plethrum.

The third large basin had been completely filled in and is suggested on Moorehead's map only by dotted line. The semicircular channel as it abuts the river at either side, measured roughly 3000 feet between the ends encircling the Etowah Mound. Moorehead says of these basins: "Directly north of the ranking mound are two rather large and wide ponds . . . It has been the writer's theory that Etowans, realizing that the distance was not very great to the river bank from the easternmost depression, cut a channel through. . . . It is quite likely that large dugout

canoes, undoubtedly used by the Etowans, were brought up this channel and kept within the depressions, or ponds, to which we have referred."

In giving these earliest verbatim accounts of this spectacular Etowah Mound, we did so in order that the reader might share in the wonder and bewilderment experienced by first travellers and thereby might have greater appreciation of its pre-eminence for in this way its grandeur can be better adjudged. Here in an ancient day stood a priceless treasure "impressive in form, venerable in its antiquity, solemn and silent—a remarkable exhibition of the power and industry of a former race." Of its seeming importance there can be no doubt. That it emulates Plato's description of Poseidon's temple insofar as would be possible after an elapse of some 2500 years and erosion of time, we believe can be accepted for no other ancient work in the United States rises to dim its luster. That it served as a temple or palace with its narrow passageway to the uppermost pinnacle presumably reserved for the highest functionary be he king or priest, appears logical. That it had not been constructed by the historic Indian or his ancestors was more than amply confirmed by every early explorer who questioned the elderly Chiefs.

Artifacts pictured in Moorehead's book again portray designs common to the Eastern Mediterranean—bowls with the modified running meander or wave design but more specifically one copper ornament which is identified as a head ornament or head-dress, several of which had been found at the head of skeletons. This crescent-shaped embossed copper piece was described as crossing the crown of the head from front to back seeming to be an upright crest symbolic of the short hair on warriors who shave the sides of their head. As one looks at the sketch of this embossed copper head ornament, the first thing that comes to mind is the small head with an almost identical head



Copper head-dress from Etowah

ornament that appears on the Phaistos Disc—typical of ancient warriors.

That the Etowah palace stood for many generations and provided home for a vast number of persons is confirmed by extensive village sites adjacent to the Great Mound itself. Its fame appears to have been widespread spanning centuries of time from Odysseus to DeSoto for it was this legendary site that DeSoto sought and which he missed by only a few short miles having ascended the Flint river fork of the Apalachicola rather than the Chattahoochee fork reaching just south of Atlanta, then circling around through the Carolinas and Tennessee with the Etowah Mound in the very center—which he missed.

That DeSoto knew approximately where he was going appears probable. Earlier we traced DeSoto to Cale and

then to Apalachee Bay, both names of which had been recorded by the Fidalgo of Elvas and by Ranjel, DeSoto's private secretary, noting that these names existed on those spots before their arrival and before the earlier expedition of Narvaez who likewise was acquainted with Apalachee Bay. In addition, we traced the Melungeons, who had migrated to the upper reaches of the Clinch river, as having come this same way about 734 A.D. This was the group it will be remembered that left Cale in Portugal and later founded the Seven Cities on Antillia. They left records by means of names of places and it was these same names that DeSoto noted. It is our belief that these early Portuguese knew either from more ancient legends or from mariners that this ancient palace at Etowah once existed and it was here they came. Whether or not this palace may still have been in existence in their time is unknown but it appears certain that they knew of it and knew where they were going. They were going to "the palace." They travelled up the Apalachicola taking the Chattahoochee fork coming just north of Atlanta and arrived at "the palace." If any place name had significance, it surely must be our present-day word "Appalachia"—*a palacio*—to the palace, translated from Spanish; "Apalachicola"—the trail to the palace or upriver. That was the destination of the Melungeons and it was in all probability that group who early identified the direction to this ancient palace—that described by Plato. *A palacio*—"This way to the palace!" What better road map might DeSoto have had? This was the palace Narvaez sought and Cabeza de Vaca described but never saw. "Appalachia" derives from the Spanish—it is not an Indian word and the surprising thing is that no one has recognized it earlier.

All major phenomena of Plato's 3000 year old mystery have now been put together like a jig-saw puzzle. The "lost Atlantis" was first related to the island of Antillia—an island at a far distant point in the Atlantic Ocean. This island covers an area equally as great as Libya and Asia as Plato specified its size and its size is no exaggeration. On Antillia, we located the cave of Evenor which dated some 9000 years and found the date fairly accurate; the extensive plain in Alabama facing south with the unsurpassingly beautiful Great Smokies protecting it from northern blasts corresponded with Plato's description; fruit trees; springs of hot and cold water; aromatic herbs; gold and silver mines as well as copper all existed anciently; the tremendous manpower required to build the thousands upon thousands of mounds appears to have foundation in fact; designs of both the meander and double-axe common to Eastern Mediterranean countries in the time of which Plato wrote exist throughout the area—fortifications, bastions, towers, bridges, covered passageways, circles of water, outer islands and ruins of submerged buildings on those islands and lastly the magnificent palace of Poseidon and Cleito at Etowah; have all been located. All phenomena have been accounted for and only one major phenomenon remains—the fateful earthquake and flood—which will now be considered.

OF EARTHQUAKE AND FLOODS

CHAPTER XII

Earthquakes are a terrifying experience to live through. One moment a busy city goes about its daily chores and the next moment it lies in a heap of rubble. Both San Francisco and Tokyo were reduced by earthquake. Peru and Chile along the Andean chain are subject to violent and intermittent series of shocks. A small outpost station at Huancayo, due east of Lima, high in the Andes, records these shocks and as you watch the needle on the seismograph go off the chart, shivers go up and down your spine following the needle and you know you have lived through a quake as the earth trembled. Down on the far side of the mountain rocks fell damming up a river flooding out the tiny village of Satipo and 3000 persons drowned.

The Biblical Flood in the time of Noah was neither the first nor only one to relate the story of a great deluge. In the Gilgamesh Epic of the Sumerian, we are told that a great flood swept over the land. From the Greek, we have the legend of Deucalion and Pyrrha. Upon his return to Olympus, Zeus, father of the gods, determined to wipe out the whole infamous race of men. Laying aside his thunderbolts, he resolved to send torrents of rain down upon the earth and drown all mortals in a vast flood. He reached up into the sky, gathered the clouds into his mighty grip and squeezed them dry. Masses of rain beat down from the heavens and violence of the storm loosened the rivers, dams broke, the ground shook and water deluged the earth.

Deucalion and Pyrrha, warned in advance, built a boat and so were saved.

In the western hemisphere, two flood legends have come down to us—the *Popol Vuh* of the Quiché Maya of Guatemala and the *Book of the Hopi*. In the *Book of the Hopi*, one of the most fascinating of traditions that have been preserved, the Hopi bring the flood legend right to our very doorstep. The story as related in their own enlightened fashion is as follows:

"Soon the people of many cities and countries were making shields of hide and flying on them to attack one another. So corruption and war came to the Third World as it had to the others.

"This time Sotuknang came to the Spider Woman and said, 'There is no use waiting until the thread runs out this time. Something has to be done lest the people with the song in their hearts are corrupted and killed off too soon. It will be difficult, with all this destruction going on, for them to gather at the far end of the world I have designated. But I will help them. Then you will save them when I destroy this world with water.'

" 'How shall I save them?' asked the Spider Woman.

" 'When you get there look about you' commanded Sotuknang. 'You will see those tall plants with hollow stems. Cut them and put the people inside. Then I will tell you what to do next.'

"Spider Woman did as he instructed her, she cut down the hollow reeds, and as the people came to her, she put them inside with a little water and white cornmeal dough for food and sealed them up. When all the people were taken care of, Sotuknang appeared.

" 'Now you get in to take care of them, and I will seal you up,' he said. 'Then I will destroy the world.'

" 'So he loosed the waters upon the earth. Waves higher than mountains rolled in upon the land. Continents broke

asunder and sank beneath the seas. And still the rains fell, the waves rolled in.

"The people sealed up in their hollow reeds heard the mighty rushing of waters. They felt themselves tossed high in the air and dropping back to the water. Then all was quiet and they knew they were floating. For a long time—so long a time it seemed it would never end—they kept floating.

"Finally their movement ceased. The Spider Woman unsealed their hollow reeds, took them by the top of their heads, and pulled them out . . . Looking about them, they saw that they were on a little piece of land that had been the top of one of their highest mountains. All else, as far as they could see, was water. This was all that remained of the Third World."

Book of the Hopi. Pt. 1, Chapt. 3.

Elders of the Hopi, wishing to preserve their own legends, related their story by means of oral transmission to Frank Waters who, living on their reservation for a period of four years, put their folk-memory into writing. Of all stories telling of the Flood, the story as given by the Hopi appears to be the only one that has come to us direct from the people themselves by word of mouth and of their own volition.

One of the many problems concerning these ancient tales has been the struggle to decide if the stories themselves were diffused by word of mouth around the globe or whether the flood itself spread around the globe. As yet no one has been able to decide which diffusion took place. On reading these tales of a by-gone day, one frequently wonders about the deluge and why historians rarely pursue it further. The Hopi, as well as Plato, narrate events far in excess of an ordinary flood. Some of these startling revelations within folk-memory should give us considerable pause.

Destruction by earthquake, those unpredictable upheavals of nature, create havoc over a wide area. In historic times, four major quakes shook the earth to its very foundation: (1) Lisbon, Portugal in 1755; (2) New Madrid, Missouri in 1811-1812; (3) San Francisco in 1906; (4) Tokyo in 1923. Since the earthquake at New Madrid affects our island of Antillia and since comparatively little is known of this quake although it happened only little more than 100 years ago right in the very heart of mid-America, it has important bearing on our story.

One of the greatest earthquakes in North America, or in the world, occurred near New Madrid on the Mississippi river midway between Memphis, Tennessee and Cairo, Illinois. Three major shocks struck, the first on 16 December 1811, the second on 23 January 1812 and the third—which was reported to be most violent—on 7 February 1812, when waters of the Mississippi "gathered up like a mountain rising fifteen to twenty feet perpendicular and then receded within its banks with such violence that it took whole groves of cottonwoods which edged its borders. Fissures in the earth vomited forth sand and water, some closing again immediately." Numerous intermittent and after-shocks occurred of which 1,874 were of sufficient force to be felt in Louisville, Kentucky, 200 miles away. The first shock of 1811 was of such amplitude that it shook down chimneys in Cincinnati, on the Ohio river, 400 miles distant—shocks were felt as far away as Canada to the north and the Gulf Coast to the south. The area of greatest shock rocked about 40,000 square miles and was considerably greater than that which accompanied the California quake of 1906 and largely on that basis it has been judged by many seismologists that the New Madrid earthquake was the largest in the United States since white man arrived. In one region 150 miles long by 40 miles wide, the ground sank from 3 to 9 feet and was swallowed up by

river water which flooded. At one point a monstrous wave towered up overflowing the banks of the river, so high it covered tops of trees 30 feet above water level and flooded the entire countryside for miles on either side. In places, extensive forests were overthrown or ruined by loss of soil shaken from the roots. On another occasion, water filled a huge fissure creating a lake. This lake mysteriously appeared in territory, then Indian country, immediately after the last violent convulsion rocked the area. No one saw it happen—there it was. Today, Reelfoot Lake in northwestern Tennessee, provides a stopping place during winter migrations of waterfowl travelling south from Canada—a lake created by an earthquake.

Loss of life during the quakes at Lisbon, San Francisco and Tokyo was infinitely greater than at New Madrid since population on both banks of the Mississippi in 1811 was sparse at best and land on the west bank had been acquired only eight years before from France as part of the Louisiana Purchase. New Madrid itself consisted of small scattered Spanish and French settlements while Chickasaw roamed over the eastern bank. Had this violent convulsion taken place one hundred years later, great metropolitan centers such as St. Louis and Memphis with their millions of inhabitants would have been wiped out and Chicago, in 1811 still Fort Dearborn, 350 miles north of New Madrid, would likewise have incurred tremendous loss of life and property and the death toll in the entire region would have staggered the imagination.

When land rises or falls or slips sideways, strange things happen—lakes suddenly and mysteriously appear while under the same circumstances other lakes just as suddenly disappear. One such lake that disappeared in a more distant past, stretched the length of the incredibly beautiful Shenandoah Valley extending for 150 miles from Staunton, Virginia, to Chambersburg, Pennsylvania, its waters lapping the tops of what are now the Blue Ridge Mountains. When this lake disappeared is unknown for the entire region had been intermittently subjected to earthquakes over countless ages. However, indications point to a time in the not too remote past for legends of the lake remain within the folk-memory of Indians inhabiting the region at the coming of the white man.

Existence of this ancient lake high in the Blue Ridge was noted by Julia Davis in her interesting book on the Shenandoah. Earlier, Thomas Jefferson had studied the unusual gap at Harpers Ferry and he observed: "...the mountains were formed first; that the rivers began to flow afterwards; that in this place they had been dammed up by the Blue Ridge of mountains and have formed a lake which filled the whole valley; that continuing to rise they have at length broken over at this point and have torn down the mountain from its summit to its base." Many other travellers and writers, including Garcilasso, who while not himself having been there had garnered accounts from members of DeSoto's expedition, recounted tales that told of the Apalachian Indians who have a story of the deluge and say that the great lake Theoni overflowed the mountains excepting only the mountain Olaimy, one of the Allegheny chain, which the sun preserved because of a temple there which the Indians consecrated as a place of pilgrimage.

More extensive knowledge of this area and the lake was brought to attention by Constantin F. C. Volney, the French naturalist mentioned earlier, who in 1796 came to this country to study soils. On a walking trip from Fredricktown some twenty miles distant from the Blue Ridge mountains in Virginia and Maryland, he had ample opportunity to make observations with reference to the soil—low swampy areas with bogs—unusual contour of mountain ridges. Of earthquakes he stated: "Though North America has only been known about two centuries, this period, so brief in the annals of nature, has supplied us

with numerous proofs that earthquakes have been violent and frequent throughout this region in former ages and that they have occasioned these subversions of which the maritime country affords continual and striking indications. If we ascend merely to the year 1628 when the first English colonists arrived and deduce events down to 1782, a course of 154 years, we find mention of 45 earthquakes."

As he moved closer to the mountains, Volney noted from a distance of eleven miles that great unnatural gaps appeared in the sides of the Blue Ridge through one of which flows the Potomac. He stated: "...after crossing the first ridge ... I saw before me eleven or twelve miles to the west, the Blue Ridge, resembling a lofty rampart covered with forests and rent at one place from top to bottom. This rampart appeared to me to be about eleven hundred feet in height. After emerging from among the trees, I beheld in the body of this great wall an immense rift, or gap, about 4000 or 4500 feet in width. At the bottom of this gap flowed the river Potowmack. The more I consider the situation of the adjacent country, the more I am confirmed in the belief that the Blue Ridge was once entire, and by shutting the door against the river forced it to expand into a considerable lake. The numerous cross ridges which succeed each other from Fort Cumberland could not fail to establish this lake westward from North Mountain. On the other side, the valley of the Shenandoah and Connegochiegue would naturally form a lake between Chambersburg and Staunton. At the level of those heights, whence these two above mentioned rivers take their course, is much below that of the Blue Ridge and North Mountain, the line of their summits must have formed the boundaries of this lake which must have diffused itself southward as far as the great bow of the Allegheny. The two upper branches of the James river, barred in like manner would augment this lake with all their waters."

What better description of a violent earthquake, shattering mountains and an accompanying flood covering the land, could parallel Plato's story? Volney, a renowned French naturalist, preserved for us evidence long since destroyed by settlers pushing westward and few accounts could have been more explicit. Swamps and bogs remained in his day.

Plato told us that the island of Atlantis was swallowed up by the sea and vanished. Had he said that flood waters covered the earth and land disappeared from sight—no one would have misunderstood his meaning. Sooner or later flood waters would drain off. Natural drainage takes place over an extended period of time and this particular area may well have taken many generations to emerge as dry land for the land was low and as late as 1796, it was still swampy. How different would this flood be from that of Deucalion or Noah, or of the Hopi, when the earth also disappeared from sight and was swallowed up by the flood? No question would have arisen with Plato's account.

Noah's flood supposedly lasted for forty days and all the high hills were covered. After one hundred and fifty days the water abated and six hundred years later the earth dried up. If Plato were given the benefit of the doubt, regardless of whether or not we believe Noah's flood, an extended period of time might well have intervened before these waters covering the earth drained off and the land dried. In the millenia between the time of first telling by Egyptian priests, translated into Greek by Solon, and a time lapse before Plato retold the story, much was lost. That this story, which has been assumed by scholars to be a fine piece of literary fiction, is in truth an historical fact, there can now be little doubt. That this catastrophic flood spawned by earthquake changed the contour of this land as noted by Volney could well explain and better determine the northern boundary of our island of Antillia.

While land to the eastward from these mountains to the Atlantic had been inundated, Volney had also noted conditions of land to the west of the Alleghenies for he pondered long on why these strata lie underneath each other; why in so many places there appear the remains of trees and other vegetables and even animals, such as the bones of the mammoths found at a place called Big Bones 36 miles above the mouth of the Kentucky river noted in an earlier chapter, and which could only have been collected there by the action of the waters.

In the Blue Ridge, a lake once existed—along the Mississippi a lake was created. The earth trembled and shook, floods covered the land. We have witnessed the effects and we now turn to the probable cause.

EARTH'S CRUSTAL PLATE

CHAPTER XIII

Once more, in *Book of the Hopi*, we find this incredibly fantastic remembrance handed down from generation to generation and still kept alive:

"So again, as on the First World, Sotuknang called on the Ant People to open up their underground world for the chosen people. When they were safely underground, Sotuknang commanded the twins, Pöqanghoya and Palöngawhoya, to leave their posts at the north and south ends of the world's axis, where they were stationed to keep the earth properly rotating.

"The twins had hardly abandoned their stations when the world with no one to control it, teetered off balance, spun around crazily, then rolled over twice. Mountains plunged into seas with a great splash, seas and lakes sloshed over the land; and as the world spun through cold and lifeless space it froze into solid ice. This was the end of the Second World.

"For many years all the elements that had comprised the Second World were frozen into a motionless and lifeless lump of ice. But the people were happy and warm with the Ant People in their underground world. They watched their food carefully, although the Ant's waist became still smaller. They wove sashes and blankets together and told stories.

"Eventually Sotuknang ordered the twins back to their

stations at the poles of the world axis. With a great shudder and a splintering of ice the planet began rotating again. When it was revolving smoothly about its own axis and stately moving in its universal orbit, the ice began to melt and the world began to warm to life. Sotuknang set about creating the Third World arranging earths and seas, planting mountains and plains with their proper coverings and creating all forms of life."

Book of the Hopi. Part 1, Chapt. 2

This was not whimsy. Something drastic happened. What are the Hopi telling us? Neither astronomers nor geophysicists and devoid of modern scientific knowledge, the Hopi apparently survived two cataclysmic destructions both of which apparently had been experienced by their ancestors—continents broke asunder and plunged beneath the sea—a question of plate tectonics? And second, they apparently had some rememberance of the last glaciation—a short period dating roughly from 3000 B.C. to 1500 B.C., when the glacier advanced and then receded. The Hopi told us of a rotating sphere—not a flat earth—with a north and south axis; they told us that at some time within their memory an unprecedented catastrophe jarred the earth teetering it off balance, spinning it out of orbit away from the sun and turning the earth into a solid lump of ice. Surely the Hopi cannot be charged with dreaming up these problems of geophysics. Perhaps some violent disruption in fact happened. Perhaps it is to the Hopi that we should listen.

Plato, too, (Tim:22C-D) tells us of a shifting of the bodies in the solar system: "There has been and there will be many and diverse destructions of mankind, of which the greatest are by fire and water. . . . For in truth the story is told in your country as well as ours, how once upon a time Phaethon, son of Helios, yoked his father's chariot and because he was unable to drive it along the course taken by his father, burnt up all that was upon the earth and himself vanished by a thunderbolt—that story, as it is told, has the fashion of legend, but the truth of it lies in the occurrence of a shifting of the bodies in the heavens which move round the earth, and a destruction of the things on the earth by fierce fire, which recurs at long intervals."

Neither Plato nor the Hopi have been taken seriously. One may ask why? In our rather smug complacency, we scoff at these legends assuring ourselves that they are pure fabrication, embroidered fantasy of a fertile imagination. Should we not have listened?

If there be any germ of truth in this ancient record, one has only to read Prof. Charles Hapgood's *Earth's Shifting Crust* to recognize that much of what the Hopi recorded actually took place. Hapgood told us of a shifting of the earth's crust; of drastic climatic changes with ice-caps at various spots on the globe; of seas where land now exists and land where today seas cover the area. Much of this, it is true, occurred in geological ages dating back a million years or more but, as Hapgood reminds us, the last great glaciation in North America receded only 10,000 years ago—8000 B.C.—in geological terms, the equivalent of yesterday and he further notes that the puzzle of the ice-ages remains one of the unsolved problems of geology. Again, we wonder if we fail to credit man of 8000 B.C., with knowledge which he must obviously have had as well as possessing the ability to transmit that knowledge. Why is it that we experience such difficulty in accepting transmission of knowledge of such matters as floods, ice-ages and shifting of the poles—phenomena of nature that must have left deep impressions on the people.

In 1912, Alfred Wegener, a German meteorologist, put forth a theory of continental drift publishing his work in 1915 under the title *The Origin of Continents and Oceans*. He believed that in some geological era the continents had

drifted apart and that at one time South America and Africa joined together. The scientific world of his day, and ours as well, spurned his theory calling it sheer nonsense and casting it aside as unworthy of scientific consideration. While Wegener was not first to propound this theory, earlier scientists including Alexander von Humboldt, had likewise reflected on the similarity of coast lines between South America and Africa but since teaching until the late 1950's rejected any supposition that the crust of the earth moved, Wegener and others both before and after him were soundly derided—Hapgood was ignored.

In the wake of World War II, the sciences received an unprecedented impetus and with ample government funds at their disposal, scientists started investigations scarcely dreamed of ten years earlier. One of the areas undertaken was exploration of the bed of the ocean. By 1953, it had been determined that the ocean floor was spreading apart down the midAtlantic Ridge; by 1956, North America was found to be moving westward away from Europe and Africa at a rate of about one to two inches a year; by the late 1960's, theories of Wegener again came to attention and, after a lapse of some fifty years, most scientists reluctantly accepted his theory of continental drift. Sea-floor spreading has now been joined to the theory of continental drift and a new earth science emerged presently known as plate tectonics. Recognizing this almost unthinkable potential, an unexpected world opened up to scientists and it did so with incredible speed, creating what amounted to a mini-sized revolution within the study of earth sciences. Questions as to probable cause of the movement of the earth's crust immediately arose and speculations varied from an unbalancing of the spinning earth caused perhaps by the polar ice caps to theories that the earth may again tip in space and its crust move into a new position and noting that the planet's magnetic field has reversed, flip-flopped north and south many times in past geologic ages—matters also raised by Hapgood and reminiscent of the Hopi.

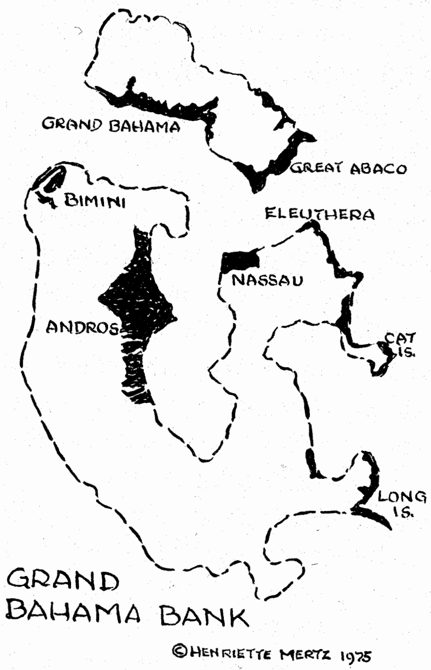
Tribute should be paid to these open-minded earth scientists who put their shoulders to this new concept and worked together as a team, not motivated by selfish interests or personal glory—men and women from diverse disciplines as well as those from different nations and within a remarkable period of less than five years accepted the theory of continental drift and almost instantaneously by-passed it with the discovery of plate tectonics. The earth was not one single immovable crust as we had heretofore believed but rather was formed by a series of great plates which almost imperceptibly creep along causing the earth to shudder and tremble. As yet, it is not known what mysterious force triggers this motion—some plates moving toward each other and colliding, other plates moving apart.

It appears that movement of these great plates when they collide or when they grind against each other generate earthquakes. Seismologists determining the epicenter of these quakes are thus enabled to form a pattern by the frequency of quakes in a given region of the earth's surface and so plot the boundary of the great plates. As this area of the study of earth science could hardly be presumed to be even in its infancy and only broad general theories have been advanced within these few scant years, yet change comes quickly as new developments arise and what was technically considered acceptable yesterday becomes obsolete tomorrow. However, it is presently supposed as these plates move, crustal rock along the edges crumble and disappear in deep sea trenches. One plate may bend down and slide underneath the leading edge of an adjoining plate and so break up and disintegrate. One type of seismic zone is related to these deep-sea trenches associated with volcanic island-arc systems—such for example, as the group of

islands forming what is known as the Caribbean plate, which extends from Venezuela arcing along the Lesser and Greater Antilles bordering on the Puerto Rico Trench, the greatest known depth in the Atlantic Ocean at 28,374 feet, immediately north of the Dominican Republic. At one edge of this Caribbean plate some deep force within the earth slipped causing the devastating earthquake which levelled Managua, Nicaragua on Christmas eve, 1972.

When an earthquake or volcanic eruption occurs off shore or on land close by the sea, the sudden violent shock creates huge tidal waves, called by the Japanese term tsunamis, which spread with tremendous rapidity racing across thousands of miles of ocean, flooding the coasts and inundating towns and villages bordering the sea. An earthquake of 1946 off Alaska produced a tsunami reaching Hawaii at 55 feet. Bordering the Aleutian Trench, Alaska spawns a frightening number of earthquakes and volcanoes. The quake of 1958 generated a prodigious wave of 680 feet on the south coast of Lituya Bay, some 150 miles north of Sitka, while on the north coast of the bay, waters rose to a height of 1,720 feet. The tsunami starting in Chile after the devastating quake of 23 May 1960, raced on to rampage through Hawaii 6,200 miles away causing 61 deaths and well over $20,000,000 damage and devastated the coast of Japan 10,600 miles away. The Tokyo earthquake and resulting sea wave of 1923 left more than 246,000 dead or missing. An earlier destructive tsunami, back in 1896, struck the coast of Hondo, Japan, and in the incredible space of five minutes 27,000 persons were lost and 7,600 buildings destroyed. Along the volcanic island-arc of the Caribbean plate, the eruption of Mt. Pelée on 8 May 1902 and its accompanying tsunami, wiped out the entire city of St. Pierre killing its 40,000 inhabitants—all but one. One man had been imprisoned, held captive in an underground cell and, paradoxically, was the sole survivor escaping this devastation with his life.

In a past geological age when a mountain range extended from North Africa to Southern Spain, where now exists the Strait of Gibraltar, it is believed that the great African plate collided with the European plate shattering this ten mile mountain dam, opening flood waters of the Atlantic which raced through the 2500 mile length of the Mediterranean and flooded the Nile some 750 miles upriver. How far inland force of this water inundated the land when that mountain dam broke, no one can even hazard a guess. This horrendous act of nature occurred before the emergence of man. Suppose for a moment that it had happened 2000 years ago? What then? 2000 years ago the entire Mediterranean basin from Gibraltar to Alexandria harbored populations running into millions all of whom would have been washed away.



Grand Bahama bank submerged

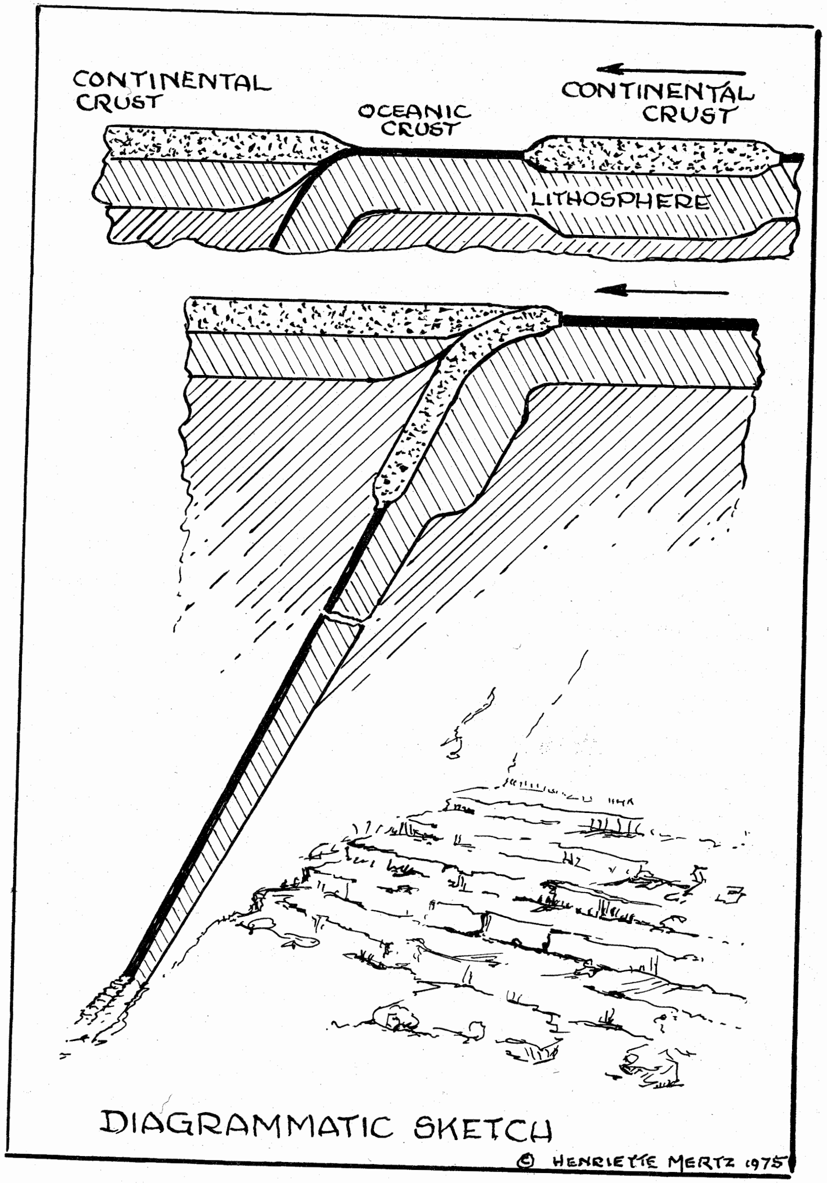
We should like to consider the Caribbean plate and conjecture what might have happened in the past along the edge of that plate. In his paper "Late Quaternary History, Continental Shelves of the United States" presented before the VII Congress of the International Association for Quaternary Research, Joseph R. Curray of Scripps Institute, considered the question of rise of sea-level along the eastern continental shelf of the United States which occurred sometime after 5000 B.C. when sea-level lay approximately 30 feet (10 m.) below its present level. He noted that opinions of geophyicists regarding time lay between 3000 B.C. and 1000 B.C. with three schools of thought: the first of which is that sea-level has been slowly and continuously rising throughout time and reached its present position only very recently; the second is that sea-level reached its present position and has been stable for the past 3000 to 5000 years—or from 3000 B.C. to 1000 B.C.; the third is that sea-level first reached its present position sometime between 3000 B.C. and 1000 B.C. and has been fluctuating above and below its present position since that time. Dates that recent should give us considerable pause for if sea-level off our continental shelf rose 30 feet at any time between 3000 B.C. and 1000 B.C., we can no longer ignore this rise which in all probability covered building complexes now submerged on the Great Bahama Bank between the islands of Andros and Bimini. Curray's paper was published in 1965, a few short years before Valentine's discovery of these ruins and before the question of continental drift was settled or plate tectonics even dreamed. At the time North American Rockwell initially submitted the question to the group of scientists, as to whether or not possibility existed of an ancient civilization in the Bahamas, they received a negative reply based on the fact that no tool marks were found on the 17 blocks examined, indicating that the line of blocks off Bimini was not of human construction. In presenting this type of proof, it must be understood that lack of tool marks constitutes negative evidence which has no value since tool marks are not a prerequisite to human construction of buildings or walls. There appears to be no reference in the scientific reports that sea-level was 30 feet lower at this late date as Curray has found which, in turn, would indicate that possibility did in fact exist that these submerged buildings would have been above water and could well have been constructed during this period from 3000 to 1000 B.C. providing for an ancient civilization in which North American Rockwell had expressed interest.

To return to the Caribbean plate and the submergence of the buildings on the Great Bahama Bank, we believe it would not be out of order to question whether at this period of time some major slippage of the plates might not have occurred. Again, as a matter of conjecture based on the legal inference as to the existence or truth of a fact not certainly known drawn from the proved existence of a related fact—we should like to consider cause and effect, earthquake and flood—the existence of the flood being proved and existence of the earthquake inferred. If the Caribbean plate is imperceptibly moving northward in much the same manner as the plate off the western coast of California along the San Andreas fault, and the grinding motion of the Caribbean plate pushing against the Great North American plate forced it downward into the Puerto Rico Trench, major catastrophe would have resulted spawning a tremendous sea-wave rolling over low-lying land along our eastern seaboard as well as over thousands of miles of open ocean. Such a calamity would have had violent repercussions round the globe. Action of slippage and grinding of these plates falls well within the realm of probability as we now understand this constant movement of the earth's crustal plates.

Suppose for a moment that the Caribbean plate did in

fact collide with the North American plate sometime around 1200 B.C.—roughly the time when Russell Cave was flooded—and the Caribbean plate bent down sliding under the leading edge of the northern plate crumbling the edges as it disintegrated into the depths of the Puerto Rico Trench. What tragic consequences would it have created along the Atlantic seaboard as well as along the Gulf Coast? What a towering tsunami! How inconceivably high would that wave have been and with what force would it have travelled over land and sea? As noted above, the Alaskan quake of 1958 sent towering waves of 1,720 feet over Lituya Bay; the Chilean quake of 1960 spawned waves that washed right over Hawaii and destroyed coastal regions of Japan 10,000 miles away. What greater force than an earthquake caused by slippage of this tremendous plate? Land along the eastern seaboard and Gulf Coast is low—most of it at sea-level rising only from 100 to 500 feet stretching from Chesapeake Bay to the Florida Everglades and on to the Mississippi river—and so would be swallowed up. We believe that the inference of cause and effect, noted above, provide acceptable evidence lending probability to our conjecture.

Turning to the year 1964, five years before the theory of plate tectonics became known, a strange discovery came to light. In August of that year, the French Research Submarine ARCHIMEDE, under command of Capt. Georges Huout, while diving at great depth within the Puerto Rico Trench and off the north coast of Puerto Rico, sighted a gigantic stairway carved into the solid rock 100m. long and 4m. high. Capt. Huout reported this extraordinary discovery and stated that in his opinion this unusual formation in all probability was a geological phenomenon. In a letter to this author, he reaffirmed that opinion. Capt. Huout's opinion must be respected. However, at the time of his discovery, knowledge of the submerged ruins in the



Diagramatic sketch showing movement of plates

Bahamas had not yet become known. It will also be remembered that these submerged ruins had likewise been written off as an unexplainable geological phenomenon by the American geologist and that the French geologist who came here with a preconceived opinion of a geological solution, completely reversed that opinion after his extensive examination, pronouncing these ruins to be both ancient and man-made—an archaeological solution. Possibility exists that the gigantic stairway carved into solid rock which Capt. Huout discovered off the coast of Puerto Rico, may also have been part of this complex situation and likewise be both ancient and man-made. If, as we surmise, the great Caribbean plate did in fact collide with the North American plate causing the earthquake and flood, and the leading edge of that plate slipped under, possibility might well exist that this stairway constitutes unexplained evidence that could well support such a conclusion.

Above, we also noted that the bed of the ocean was spreading apart down the midAtlantic Ridge and that North America was moving west away from Europe at the rate of approximately one to two inches per year. During the summer of 1974, the French Research Submarine ARCHIMEDE and the U.S. Navy Research Submarine ALVIN conducted an intensive scientific study of this highly complex problem. As this entire field is in a state of flux only momentarily having been born, it must be appreciated that answers to these questions are not as yet known. Whether or not our island formed part of a larger island that had been rafted to its present position is a moot point that must wait for a future generation to resolve. We call attention here to these important problems hoping that study will be made since the technical field of geophysics holds within it the final solution.

CONCLUSION

CHAPTER XIV

When we began our story, we had only one objective—to seek the truth in Plato's tale if truth there be. If his story were factual, we believed that some evidence would exist and we hoped to find it. Since Plato has repeatedly been accused of exaggeration, we disregarded all previously advanced theories and restricted our study to the four corners of Plato's document with no preconceived theory of our own. During the course of our rambling through history, geography, cartography, archaeology, navigation and geophysics—sea-floor spreading and plate tectonics, we found only one ambiguity, or misunderstanding in Plato's account—the matter of two time periods—the very early one before people had ships and the later one when great ships sailed the seas. The earthquake, therefore, would have occurred in the later period when ships sailed.

Our quest started with search for an island at a distant point in the Atlantic Ocean and almost immediately we found what appeared to be an important clue—the spectacular discovery in 1968 of submerged ruins in the Bahama archipelago. Possibility then existed that these ruins could well be the remnants of an ancient civilization inhabiting islands which Plato told us stretched out from the island of Atlantis into the ocean. Conjecturing that such might be the case, we then confined our study to this region of the Atlantic. Commencing with the expedition of

DeSoto, showing his knowledge of a legendary island in the far Atlantic known to him from ancient nautical charts by the name of Antillia, we carried our study, step by step, from the known back to the unknown. We located two medieval charts showing this island of Antillia and recognized the south coast of Andrea Bianco's 1436 Chart as being that of our own Gulf Coast from Florida to New Orleans. This important chart then guided us around the boundary of Antillia which, in turn, we concluded might be one and the same island as Plato's Atlantis. To determine how much farther back in time the island of Antillia might have been known, we traced the name back some 700 years learning from Martin Behaim's Globe that a group of Christians left Portugal in 734 A.D., at the time of the Moor's invasion, to seek refuge on the island of Antillia and who, according to Portuguese records, arrived safely in Antillia. We then visited possible descendants of that group, an enigmatic people presently living on the upper reaches of the Clinch River in northeastern Tennessee. We surmised that it was ancestors of this group who founded the fabled Seven Cities of Antillia and who gave us our word "Appalachia" from the Spanish *a palacio* meaning "to the palace."

We carried back knowledge of the island to Diodorus Siculus at Carthage about the turn of the Christian era and pushed still farther back into antiquity with records of the "isles of the seas" from dynastic Egypt where tomb paintings portrayed Keftiu, "Red Men" carrying copper to Egypt. "Red Men" and copper were found together on the North American continent, on Isle Royale and the Upper Michigan Peninsula, where ancient mining out of some 500,000 tons of pure copper dated to a period between 1800-1000 B.C.

At that point, the chain of events centered in North America crystalizing around the southeastern part of the

Plate XII—Light shines again Photo by Stephen Gwin

United States. Therefore, geometrically constructed mounds requiring a high degree of mathematical skill were next considered. Existing records indicated that Indian Chiefs had informed early white settlers that their forefathers did not construct the artificial mounds but that they had been built by a more ancient race of people who had disappeared before their forefathers came. We suspected that an analogy might well be drawn between sophisticated mound construction here and the well-known barrows of Mycenaean Greece. The universally-recognized meander design on scores of bowls recovered from mounds in Ohio and Georgia confirmed that supposition. With this extensive mound-building program, the vast man-power necessary to

carry it out easily accounted for the tens of thousands of persons recorded by Plato as living on the island of Atlantis.

If indeed this were the area Plato described, the time periods required verification. Evenor was soon identified as a possible relative of Folsom Man roaming around Appalachia some 10,000 or more years ago to coincide with the early time period that Plato placed at 9000 years. We next identified the ancient palace of Poseidon and Cleito at Etowah, Georgia. This majestic structure, venerable in its antiquity, solemn and silent, is known to have been the most important building in the eastern part of the United States—the palace sought by DeSoto as well as the Melungeons.

Within the boundary of Bianco's Antillia, every major phenomena, geographic or otherwise, recorded by Plato was located. We then came to the earthquake which was described as "portentous." This earthquake and flood was conceivably the most colossal and devastating the world has ever witnessed since the flood inundated the entire island washing away its thousands upon thousands of inhabitants. We pin-pointed that earthquake as occurring in the volcanic island arc chain of the West Indies probably centering off the north coast of Puerto Rico.

It has always been assumed that the surface of the earth was one solid immovable crust but scientists now find that the earth's crust is neither solid nor immovable but rather a series of separate plates which are in constant almost imperceptible motion. The slight movement of these crustal plates triggers that which we experience as earthquakes. It is our belief that ample evidence exists to support our conclusion that the edge of the Caribbean plate, apparently grinding against the leading edge of the North American plate, collided and the Caribbean plate slipped under causing this indescribable calamity. A tidal wave of gigantic proportion generated by this collision washed over our low island, the island remained flooded for untold generations resulting in the vast swampy areas throughout the eastern part of the United States from the Dismal Swamp of Virginia to the Everglades in Florida.

It was the unexpected finding of wet, sticky, orange-colored clay sandwiched in between two layers of dry soil within the huge cavern of Russell Cave that provided us with the highest degree of evidence that a flood of major proportion had occurred in an ancient day on this very spot. The vast extent of that flood was confirmed by the orange-colored clay removed from the southeastern wall of a building excavated by Major Webb some two hundred miles away. It was again confirmed by unexplained patches of orange-colored clay within mounds excavated by Thomas as well as the water-logged boat burial—the sun-baked clay boat having been put there dry. This amazing evidence of a racing avalanche of waters travelling at tremendous speed inundating the island, in itself corroborates Plato's flood beyond controversy. Such tangible evidence is unprecedented. The flood is now for the first time explained.

We further called attention to Alfred Wegener's theory of continental drift which had been soundly ridiculed only to learn now that he was correct. Within the past few years, scientists have determined that the western hemisphere is slowly drifting away from the eastern hemisphere which now confirms Wegener's theory. We thus have two separate movements of the surface of the earth of which we previously had no knowledge.

The period of time when that portentous earthquake sent gigantic tidal waves rolling over the island would appear to lie somewhere between 1600–1000 B.C., probably close to 1200 B.C. Dates from the wet clay of Russell Cave indicate that approximate date; sudden disappearance of the unknown sophisticated race of mound-builders as

well as disappearance of skilled miners from the Upper Michigan Peninsula falls within this general time period as does tipping of the crust causing rising of waters over the Great Bahama Bank. These events appear to cluster around 1200 B.C., a date consistent with the time period Plato told us that great ships sailed the seas. Here on the island that we have identified as "Antillia" was the cave of Evenor—here was the Palace of Poseidon at Etowah. Here were the fruit trees, the beautiful low mountains. Here were hot and cold springs. Here were copper and gold mines. Here were thousands upon thousands of inhabitants. Nothing appears inconsistent and everything appears accounted for. We found Plato's story to be basically correct with little or no distortion imposed by time—and thus historical fact.

Our study of this historic enigma was confined entirely within the framework of Plato's *Critias* and *Timaeus*. If truth there be in his story, it must be found there. And we so found it. Plato's facts were found to be both logical and amazingly accurate. Although millennia have elapsed since the first telling to Solon, this incredible story as related by the Egyptian priest thus appears to have originated with an eye-witness—neither exaggeration nor fantasy.

We believe the mystery surrounding the lost island of Atlantis for more than three thousand years has been solved. Atlantis has been found.

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Atlantis: Dwelling Place of the Gods

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